The Report Committee for Lyndy Rae Morris
Certifies that this is the approved version of the following report:

Repurposing Austin's Historic Schools To Increase Affordable Housing

APPROVED BY
SUPERVISING COMMITTEE:

Supervisor:

Michael Holleran

Elizabeth J. Mueller

Repurposing Austin's Historic Schools To Increase Affordable Housing

by

Lyndy Rae Morris, B.A.

Report

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Science in Community and Regional Planning

The University of Texas at Austin

May 2017

Abstract

Repurposing Austin's Historic Schools To Increase Affordable Housing

Lyndy Rae Morris, M.S.C.R.P.

The University of Texas at Austin, 2017

Supervisor: Michael Holleran

This professional report addresses the issue of housing affordability in Austin, Texas, and explores adaptive reuse of historic school buildings as one solution. The report looks at the relationship between affordable housing and historic preservation as well as the relationship between neighborhood schools and the community. I explore case studies of adaptive reuse projects around the United States that have converted historic school buildings into affordable housing using a combination of Historic Tax Credits and Low-Income Housing Tax Credits as a financing strategy. I then explore the possibility of adapting the Baker Center in Austin into affordable housing as an example for future projects. Finally, I look at the applicability of adaptive reuse strategies to Austin's inventory of historic post-war neighborhood schools.

Table of Contents

List of Tables

List of Figures

Chapter I: Introduction

Housing Affordability

All over the country both the demand for housing and the cost of rent is increasing. Housing Affordability in the United States is defined as less than 30% of gross income spent on housing costs. Housing that costs less than 30% of gross income is, however, becoming harder and harder to come by, not only for low-income residents but moderate-income residents as well.

The Low Income Housing Coalition shows that minimum wage workers cannot afford to rent a one-bedroom apartment in any state. Figure 1 is a map based on 2015 data and shows how many hours per week it would take a minimum wage worker to be able to afford a one-bedroom apartment at the fair market rent.[1] In 37 out of 50 states, a minimum wage worker would have to work more than 60 hours per week in order to afford even a one-bedroom unit at fair market rate without paying more than 30% of their income. In Texas specifically, they would have to work 73 hours per week.[2] Even in places with the highest

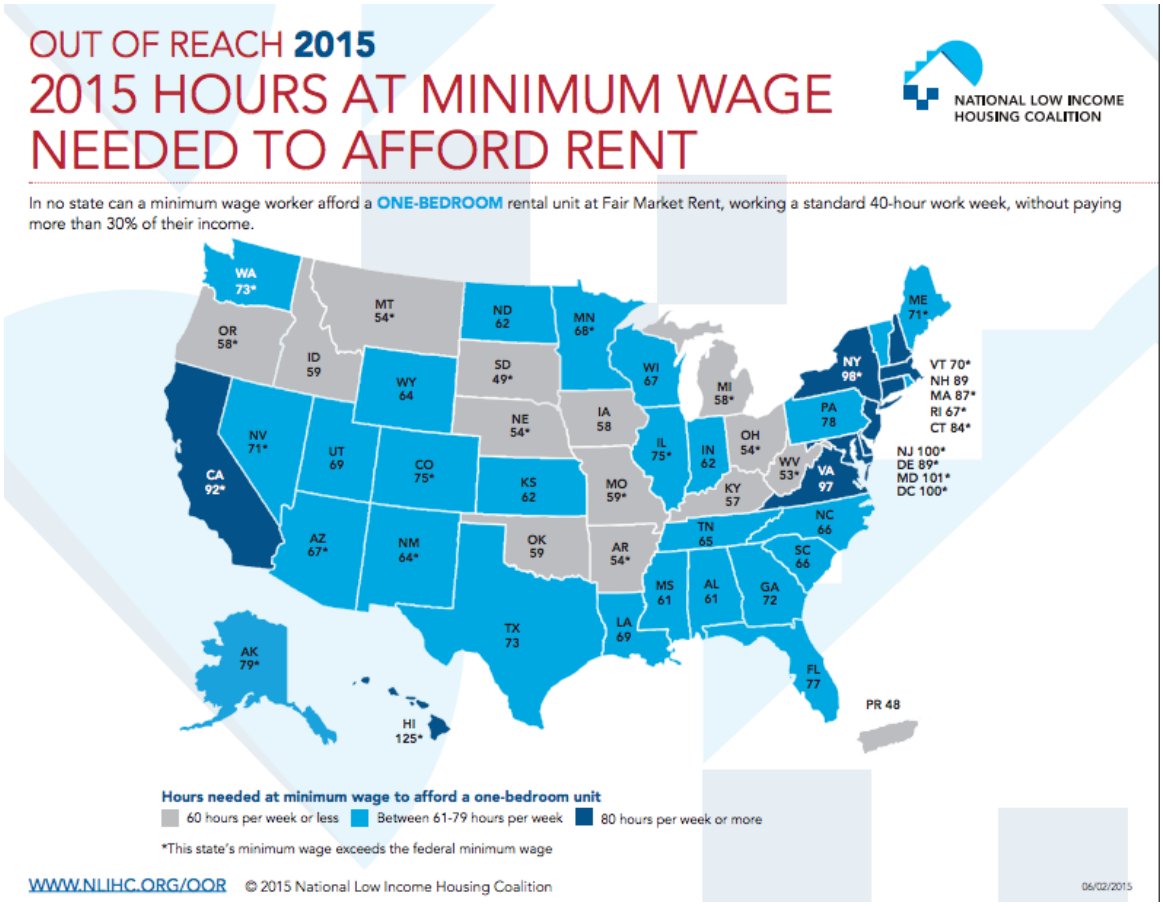
---

[1] The U.S. Department of Housing and Urban Development (HUD) annually estimates Fair Market Rents (FMRs) for 530 metropolitan areas and 2,045 nonmetropolitan county FMR areas. According to HUD, Fair Market Rent is "the rent that would be required to be paid in the particular housing market area in order to obtain privately owned, decent, safe and sanitary rental housing of modest (non-luxury) nature with suitable amenities. This Fair Market Rent includes utilities (except telephone)."
US Legal, "Fair Market Rent Law & Legal Definition," *Fair Market Rent,* https://definitions.uslegal.com/f/fair-market-rent/ (accessed May 4, 2017).

[2] Kyle Jaeger, "America Has an Affordable Housing Crisis," *attn:*, http://www.attn.com/stories/4920/united-states-minimum-wage-and-rent (accessed November 30, 2016).

minimum wage, it is still not enough to afford basic housing. Wages simply cannot keep pace with the rapidly rising rent costs.

Figure 1: National Low Income Housing Coalition Affordability Map



Source: National Low Income Housing Coalition

The Austin region in particular is experiencing rapid population growth that even further emphasizes the need for housing. According to the Real Estate Council of Austin, in recent years Austin has become the most expensive

housing market out of Texas' four major metropolitan areas. [3] "The average rent in the Austin area increased 50 percent from 2004 to 2013 while median incomes rose by only 9 percent."[4]

Figure 2: Austin Median Rent- Median Income Graph

Source: Austin Draft Housing Plan

[3] City of Austin, *Austin Strategic Housing Plan Draft,* June 6, 2016, http://www.austintexas.gov/sites/default/files/files/Draft_Austin_Housing_Plan_06.06.16__2_.pdf (accessed January 7, 2017).

[4] Real Estate Council of Austin Texas, *2015 RECA Affordability White Paper,* https://www.austintexas.gov/sites/default/files/files/Planning/CodeNEXT/2015RECAAffordabilityWhitePaper.pdf (accessed August 30, 2016).

The MIT developed a Living Wage Calculator that shows the hourly rate an individual must earn in order to support their family based on a number of expenses in that county. The expenses include food, child care, medical, housing, and transportation. In Travis County, in which Austin is the largest city, an individual would need to earn $10.72 per hour (more than minimum wage) just to support themselves.[5] When children are included, the necessary wage is much higher. It is apparent that low-income families, not to mention very low-income families, would struggle to find housing they can afford and still take care of their other necessities.

Table 1: Travis County Living Wage Calculator Results

Hourly Wages	1 Adult	1 Adult 1 Child	1 Adult 2 Children	1 Adult 3 Children	2 Adults (1 Working)	2 Adults (1 Working) 1 Child	2 Adults (1 Working) 2 Children	2 Adults (1 Working) 3 Children	2 Adults (1 Working Part Time) 1 Child*	2 Adults	2 Adults 1 Child	2 Adults 2 Children	2 Adults 3 Children
Living Wage	$10.72	$22.64	$26.22	$32.50	$17.96	$22.06	$24.38	$27.82	$24.89	$8.98	$12.45	$14.32	$16.76
Poverty Wage	$5.00	$7.00	$10.00	$11.00	$7.00	$10.00	$11.00	$13.00		$3.00	$5.00	$5.00	$6.00
Minimum Wage	$7.25	$7.25	$7.25	$7.25	$7.25	$7.25	$7.25	$7.25		$7.25	$7.25	$7.25	$7.25

Source: Massachusetts Institute of Technology

In past years the Austin area has not focused on housing affordability as a priority. In 2013 in Travis County only 15 percent of housing was affordable to

[5] Amy K. Glasmeier and the Massachusetts Institute of Technology, "Living Wage Calculator for Travis County, Texas," *Living Wage Calculator* http://livingwage.mit.edu/counties/48453 (accessed January 20, 2017).

extremely low-income renters.[6] More recently Austin has been recognized as the most rapidly growing city in America. Austin officials are realizing that Austin indeed is becoming a “big city” and therefore has big city issues to tackle.[7] However, the Austin Housing Plan website states that Austin still only has enough affordable housing for 1 out of 4 very low-income households. Many affordable units in Austin are not subsidized and thus are only affordable because of age and poor condition. As redevelopment occurs older units are either demolished or upgraded and low-income families are priced out of previously affordable housing. Most affordable units are located east of I-35, a historically segregated area of Austin. Affordable housing is also often located on the periphery requiring renters and homeowners to pay higher transportation costs to commute to work.

Austin’s affordability crisis is a problem that requires multiple solutions. The Austin Housing Plan points out strategies such as shared equity and Community Land Trust ownership models, modifying Homestead Preservation District legislations, Tax-Increment Finance Districts, and expanding the S.M.A.R.T. housing program among many others.[8]

---

[6] Matthew Johnson, “Stepping Up: How Cities are Working to Keep America’s Poorest Families Housed,” *Urban Institute, June 16, 2015,* http://www.urban.org/features/stepping-how-cities-are-working-keep-americas-poorest-families-housed (accessed November 3, 2016).
[7] Ibid.
[8] City of Austin, *Austin Strategic Housing Plan Draft,* 14.

Historic Preservation

One tool to address the affordability problem is historic preservation. Many argue that affordable housing and historic preservation goals seem to contradict one another. Historic Preservation is often unfairly associated with gentrification and the displacement of lower-income residents as property values increase and become attractive to higher income residents and investors. In some cases rehabilitation of historic properties attracts wealthier residents or is turned into luxury housing. However, gentrification is a much larger issue that is not driven by the weak market force of historic preservation. Many forces and factors contribute to gentrification, and many studies agree that it is largely caused by inadequate housing supply and a tight rental market.[9] More housing units are needed to ease the affordability burden and keep residents from being displaced by wealthier people competing for quality housing.

Historic preservation can provide many economic benefits including affordability. Reuse of historic buildings reduces consumption of land, energy, materials, and financial resources. Additionally, preservation conserves resources while demolition and construction waste makes up about 25% of the material added to landfills.[10] Preservation also makes use of existing

---

[9] Todd Harvey et al., "Gentrification and West Oakland: Causes, Effects, and Best Practices," (City and Regional Planning coursework, University of California, Berkeley, 1999); Barbara Eldredge, "What is Gentrification, Anyway?" *Brownstoner,* http://www.brownstoner.com/brooklyn-life/what-is-gentrification-definition-causes-effects/ (accessed March 3, 2017).

[10] City of Lafayette, "12 Economic Benefits of Historic Preservation," *Historic Preservation* http://www.lafayette.in.gov/190/12-Economic-Benefits-of-Historic-Preserv (accessed December 12, 2016).

infrastructure such as roads, sewers, and public amenities like parks and schools. In reference to affordability, the Bipartisan Millennial Housing Commission stated:

> U.S. Housing Policy must recognize that preservation is cheaper than new construction, that the rehabilitation and preservation of units returns the units to low income families faster than new construction can provide such units, and that maintaining and renovating existing units combats blight and contributes to healthy communities.[11]

Some may argue that preservation focuses on low-density housing, thus impeding the development of denser neighborhoods that could provide larger amounts of affordable housing. Stephanie Meeks in a CityLab article points out the flaws in this way of thinking. She argues that older buildings were designed to hold multiple families and uses and so can be good candidates for reuse as affordable housing. Meeks writes:

> Economists such as Edward Glaeser have argued that historic districts prevent affordability by limiting tall and dense new development that could fit everyone. But, as the urban planner Jeff Speck points out in *Walkable City,* "economists don't seem to have fully processed one thing the designers know, which is how tremendously dense a city can become at moderate heights. Boston's North End, in Jane Jacobs' day, achieved 275 dwelling units per acre with hardly an elevator in sight."[12]

Also, historic properties and traditional historic neighborhoods oftentimes include the benefits that planners strive for today. Older and historic properties are often

---

[11] Donovan D. Rypkema, "Historic Preservation and Affordable Housing: The Missed Connection," *National Trust for Historic Preservation* (2002) http://www.placeeconomics.com/pub/placeeconomicspub2003b.pdf (accessed August 30, 2016).
[12] Stephanie Meeks, "Why Historic Preservation Districts are Crucial to Cities," *CityLab,* http://www.citylab.com/design/2016/02/why-historic-preservation-districts-are-crucial-to-cities/462210/ (accessed September 2, 2016).

in close proximity to jobs, shopping, and public transportation which proves beneficial for low-income families. Likewise, historic neighborhoods tend to be in close proximity to schools as well.[13]

Combining historic preservation efforts with affordable housing efforts could potentially be a way to kill two birds with one stone. It would make more apparent the benefits of historic preservation in communities as well as lessen the burdens of housing costs while keeping people in their homes. This report does not suggest that historic preservation is the answer to housing affordability problems. Housing advocates generally agree that multiple tools need to be used. However, the combination of historic preservation and affordable housing efforts, specifically the adaptive reuse of older buildings for affordable housing, may be a useful tool for Austin to consider, since it may help the community meet multiple goals at once.

Austin's Situation

Austin is distinct from many other big cities in that it is experiencing rapid growth and has a heated housing market, but at the same time does not have the historic building stock of most major cities. The majority of Austin's historic structures are small, old homes which can prove to be a difficulty when using common preservation/affordability strategies. When it comes to adaptive reuse of historic buildings into affordable housing, many cities opt for large warehouses or hotels. Austin lacks these resources. However, the Austin area does have

[13] Rypkema, 7.

access to older school buildings. The average age of Austin Independent School District (AISD) facilities is about 40 years. As these structures continue to get older they can be evaluated for National Register eligibility.

For years the Austin Independent School District has discussed what to do with empty school buildings as they have faced issues such as decreased state funding and falling enrollment rates. Demographic studies show that AISD enrollment will drop by at least 600 students a year for the next ten years due to lower birth rates, competition from private and charter schools in the area, and affordability in Austin.[14] Families are also moving out of Austin's urban core showing much lower enrollment in the center and higher enrollment near the edges. This calls for new school facilities outside the core to provide for these families. As students are consolidated into AISD facilities, structures become empty.

Recently AISD has been discussing the future use of its "surplus properties," and may end up selling multiple structures. AISD is accepting bids for 102 acres at ten locations including the former Allan Elementary School and the former Baker Junior High. At the same time, AISD is looking at options for affordable housing for staff and students' families. Currently hundreds of teachers live outside city limits and commute to work. As of 2015, about 185

[14] Austin Independent School District, "Austin ISD Releases Demographic Report," *Press Releases,* https://www.austinisd.org/articles/austin-isd-releases-demographic-report (accessed May 4, 2017).

teachers lived in Pflugerville and 107 lived in Kyle. Often teachers move to these more affordable areas and commute to work, then over time, transfer to closer school districts. This is contributes to high teacher turnover and requires the district to spend money to frequently retrain new teachers.[15] In December 2016 the Austin City Council approved $2.88 million to bid on AISD properties with the goals of creating affordable housing. Other organizations have also submitted bids with the same goals. AISD is in turn interested in projects that benefit both the district and AISD employees and therefore may forego the highest bid in favor of a more beneficial proposal.[16] The terms of the proposals are not fully released to the public until they have been evaluated and a recommendation has been made to the trustees. The terms will likely be disclosed in March of 2017.[17] Some organizations such as Habitat for Humanity have made public their proposals for affordable housing. However, none have mentioned this goal in terms of preservation of the historic properties. Right now Austin has an opportunity to address multiple issues of affordable housing, teacher and student migration, and vacant schools through the scope of historic preservation. Reusing the historic buildings can maintain community character and heritage as

---

15 Kylie McGivern "AISD, City, County Collaborate to Identify Land for Affordable Housing," KXAN, October 13, 2016, http://kxan.com/2016/10/13/aisd-city-county-collaborate-to-identify-land-for-affordable-housing/ (accessed November 19, 2016).
16 Cindy Widner, "School district garners $90M in bids for properties," *Austin Curbed,* http://austin.curbed.com/2016/12/21/14046644/austin-development-aisd-affordable-housing (accessed January 3, 2017).
17 Melissa B. Taboada, "Austin district properties fetch up to $90 million in bids," *My Statesman,* Austin-American Statesman, December 14, 2016, http://www.mystatesman.com/news/local-education/austin-district-properties-fetch-million-bids/29aWodCWcbjLLtD8ieqfLI/ (accessed January 3, 2017).

well as a sense of place, and this practice can set the stage for future use of aging school buildings.

Chapter II: Loss of Schools

Vacant School Buildings

Many school districts around the U.S., especially those in big cities, are experiencing enrollment decline and emptying public schools partially due to changing demographics, affordability, and competition with charter schools. These cities must then grapple with what to do with the vacant buildings. Sometimes school districts hold on to closed schools in preparation for possible population increases. They will use some buildings for administrative purposes while others remain vacant. However, holding onto unused buildings can be expensive as older buildings must be maintained. Also, if they are left to sit long enough, vacant buildings often become targets for vandalism and illegal dumping. Unfortunately in some cases older school buildings are left vacant so long that they fall into disrepair and districts will choose to demolish them or sell them to parties that will demolish them for the use of the land.

Another option for vacant buildings is to sell to charter schools. This is often viewed as an unpopular choice by some residents and school districts. When more students enter charter schools, public schools have fewer students, less revenue, and it could perpetuate the empty public school issue. In Chicago, officials even pledged not to sell to charter schools. But it became apparent that in some cases charter schools offered the only viable bids for a building and

officials had to reevaluate.[18] However, some districts have successfully managed to negotiate with charter schools. For instance, in San Antonio, a charter school for art and design uses one of the surplus buildings in exchange for taking care of maintenance costs and allowing public school students access to the art and design curriculum.[19] Schools have also been converted into a variety of uses including community centers, police stations, homeless shelters, medical offices, commercial uses and housing.[20]

In 2013 the Pew Charitable Trusts created a report called *Shuttered Public Schools: The Struggle to Bring Old Buildings New Life* that looks at school building reuse in 12 U.S. cities: Detroit, Washington, Cincinnati, Cleveland, Atlanta, St. Louis, Chicago, Milwaukee, Pittsburgh, Philadelphia, Kansas City, MO, and Tulsa. The report shows that since 2005 these cities have sold, transferred, or reused 267 total properties. In addition to charter schools, the report highlights housing as a common reuse for vacant school buildings. From these surplus properties, a total of 26 have become housing projects, of which nine are subsidized housing. The report states:

> Most of the closed schools are located in residential neighborhoods, and some of the larger buildings lend themselves to multi-family development.

---

[18] Emily Dowdall, "Why Vacant Schools Still Sit Empty: A look at 11 shuttered Philadelphia schools and others around the country," *The Pew Charitable Trusts,* http://www.pewtrusts.org/en/research-and-analysis/analysis/2015/10/06/why-vacant-schools-still-sit-empty (accessed December 12, 2016).

[19] Morgan Smith, "Closing Time," The Texas Tribune, January 24, 2011, https://www.texastribune.org/2011/01/24/what-should-districts-do-with-empty-schools/ (accessed December 13, 2016).

[20] The Pew Charitable Trusts, *Shuttered Public Schools: The Struggle to Bring Old Buildings New Life*, http://www.pewtrusts.org/~/media/assets/2013/02/11/philadelphia_school_closings_report (accessed December 19, 2016).

> Despite their prior use, the buildings are commonly zoned residential and thus do not require zoning adjustments that might slow or limit redevelopment. Also, a lot of residential projects qualify for tax credits, including those for low-income housing and historic preservation. These credits can fill crucial funding gaps.[21]

Schools in Milwaukee and Pittsburgh were adapted to become subsidized senior housing, while a school in St. Louis became apartments for the “chronically homeless” using both Low-Income Housing Tax Credits and state and federal Historic Tax Credits.

[21] Ibid.

Table 2: Status of Philadelphia School District Properties Approved for Sale, 2014 and 2015

Status of Philadelphia School District Properties Approved for Sale in 2014 and 2015

Sales completed as of September 2015

School name	Approved sale date	Buyer	New use	Reuse or demolition
Stephen Douglas High School	March 2014	Maritime Charter Academy	School	Reuse
Anna Shaw Middle School	March 2014	Mastery Charter Schools	School	Reuse
Joseph Leidy Elementary School	September 2014	Belmont Academy/ Inquiry Charter	School	Reuse
Edward Bok Technical High School	September 2014	Scout Development Co.	Temporary pop-up space; permanent use to be determined*	Reuse
William Harrison Elementary School	March 2014	Independence Mission Schools	School*	Reuse
Alexander Wilson Elementary School	October 2014	University of the Sciences	Student housing and retail*	Reuse
University City High School	March 2014	Drexel University/ Wexford Science and Technology	Office space and other uses*	Demolition
Charles Drew Elementary School				
Walnut Center (Head Start site)				
William Penn High School	June 2014	Temple University	Athletics and job training*	Demolition
Elizabeth Gillespie Middle School	October 2014	Mastery Charter Schools	School*	Reuse
West Philadelphia High School	December 2012 (amended September 2014)	Strong Place Partners	Apartments*	Reuse

Source: The Pew Charitable Trust

School- Community Relationship

Loss of neighborhood schools can be especially hard on the surrounding community. They are often referred to as "anchors of the community," for their role in the education and employment of community residents. Neighborhood schools also act as community centers easily accessible and within walking or biking distance of residents. Historic school buildings in particular represent the cultural heritage and history of a developing neighborhood. Doug Blandy writes that historic school buildings are a record of a community over time and contribute to "cultural weathering" or the incremental change inhabitants make on the built environment.[22] These records give a community a distinctive character and sense of place. Even when they are vacant or no longer used as educational facilities, the buildings serve as a visible reminder to residents of their community heritage.[23] Unfortunately, in many instances historic school buildings are left to decay or investors believe they will find more value by tearing down and building new or selling the land. In 2000 the National Trust for Historic Preservation identified Historic Neighborhood Schools as one of America's most endangered places.

School districts in Iowa have struggled with declining enrollment and district consolidation resulting in the closure of numerous neighborhood schools

---

[22] Doug Blandy, "Editorial: Memory, Loss, and Neighborhood Schools," *Studies in Art Education* 49, no. 2 (2008): 83–86.
[23] Caity Hamilton, "A New Life for Old Schools: Support for the Adaptive Reuse of Abandoned Historic School Buildings" (Master's Thesis, Savannah College of Art and Design, 2013), 6.

of both historic and cultural value to community members. In 2014 the *Des Moines Register* launched *Lost Schools,* a year-long project documenting the state-wide loss of public schools. Readers of the Register were encouraged to submit as many stories and photographs as possible so that memories of these closed and demolished schools could be in some way preserved. The *Register* received hundreds of story and photo submissions which were compiled into a database. The *Lost Schools* Facebook page likewise has over 2,000 followers, and people continue to contribute memories.[24]

Figure 3: Demolition of Iowa School

Source: The Des Moines Register

[24] The Des Moines Register, *Iowa Lost Schools,* http://www.desmoinesregister.com/topic/cca0dde2-d6a2-4899-859d-ea519e48f6a3/iowa-lost-schools/ (accessed December 29, 2016).

In 2005, Mike Huffman of Lima, Ohio worked to create the “Shrines to Lost Schools” art project. The project was based on the collaboration of 600 school children grades 3-12 considering, “How does a community deal with the sense of loss associated with the disappearance of neighborhood schools?" They surveyed the sites of 12 demolished neighborhood schools and collected oral histories from past students of these schools. Students then constructed shrines for the sites. When the project was completed, members of the public left flowers, notes, and memorabilia and wrote memories on the shrine columns.[25] These instances from Iowa and Ohio serve as testament to the immense impact historic neighborhood schools have on community members and the hole that is created when a school is lost.

Although the community experiences some loss with the closure of a school, preserving and reusing the building can maintain to some extent the strong relationship to community identity and heritage. Many districts use discretion when selling a property to make sure the new use will invest in the neighborhood and benefit the community. In her thesis, “A New Life For Old Schools: Support for the Adaptive Reuse of Abandoned Historic School Buildings,” Caity Hamilton emphasizes the benefit of adapting school buildings to the most appropriate program:

> The best adaptive reuse project seeks to revitalize a building’s tie to the residents and preserve the history of the original connection through a new appropriate function… By placing a similar anchoring element in the

[25] Blandy, 83-86.

> void that was created by a school's loss, an adaptive reuse project...allows the building to continue to serve the community in a different capacity and still keep as much of its historic fabric as possible.[26]

Allan Elementary, one of the ten properties for sale by AISD, is currently serving the community as Allan Early Childhood Center. The 1957 building was a junior high school before becoming an elementary school, and in 2012 the district turned the property over to a charter school; a controversial decision in East Austin.

Communities are often divided when it comes to charter schools. Proponents value the college preparation and attention that charter schools provide. They often have smaller class sizes which allows more student-teacher interaction. However, charter schools often have limited enrollment openings which poses a problem for some families. Critics accuse charter schools of "cream skimming" or only taking the best students.[27] Charter schools may not restrict who can apply to attend the school, but once accepted students must meet grade or attendance requirement to continue enrollment. Charter school students also have limited opportunities for extracurricular activities like sports and clubs. Some charter schools serve a lower percentage of special needs students since they are not required to offer special education courses or

[26] Hamilton, 12.
[27] Valerie Strauss, "A Dozen Problems with Charter Schools," The Washington Post, May 20, 2014, https://www.washingtonpost.com/news/answer-sheet/wp/2014/05/20/a-dozen-problems-with-charter-schools/?utm_term=.4721264af677 (accessed April 14, 2017).

resources.[28] Also they may not offer services for English language learners. A charter school entering a neighborhood in place of a public school that accepts a larger amount of students may not be seen as serving the same community purpose.

After public pushback and an election that resulted in all new trustees, the contract was cancelled in 2013 and the Allan school building was left empty. The next time around, the district used community outreach to avoid the pitfalls of the charter school disaster. They used Austin Voices to ask the community what it wanted and needed in a new use for Allan. Now, the Allan Early Childhood Center houses multiple non-profits serving the community. The groups provide early childhood education, STEM (Science, Technology, Engineering, and Mathematics) education, adult literacy and education, parenting education and more. There are goals to incorporate an adult training center as well.[29]

[28] Social Solutions. "A Divided Mind: Charter Schools vs. Public Schools,"*Blog,* http://www.socialsolutions.com/blog/charter-schools-vs-public-schools/ (accessed April 14, 2017).
[29] Richard Whittaker, "Allan Rising: Out of the ashes of Allan Elementary comes the Allan Center," The Austin Chronicle, February 5, 2016, http://www.austinchronicle.com/news/2016-02-05/allan-rising/ (accessed January 3, 2017).

Figure 4: Allan Elementary School

Source: Google Maps

Since AISD is accepting bids and proposals for the property, there is the possibility it could provide affordable housing for the community. Foundation Communities is interested in building up to 200 affordable housing units on the property with a priority of housing staff and teachers. Their conceptual plan would continue and expand the use of the Allan Center to include a financial center and fitness center.[30] Although the Allan Elementary School closed, it did not stop educating and serving the community. The opposition to the charter school shows how connected and invested community members are with their neighborhood school buildings. The preservation and use of the building as an education center and hopefully as affordable housing in the future, provides East Austin citizens with immense benefits and helps them overcome barriers thus minimizing the loss felt with the closure of the school.

[30] City of Austin, *Draft Resolution,* http://www.austintexas.gov/edims/document.cfm?id=267922.

Chapter III: Adaptive Reuse

Demolition can be avoided and new life given to historic buildings through adaptive reuse. This chapter will explore adaptive reuse, strategies for funding (specifically combining historic rehabilitation tax credits and low-income housing tax credits).

Adaptive Reuse of School Buildings

There is a misconception that worn down historic buildings will be too costly to renovate and then to maintain. David Anstrand, architect and Board Member for the Council of Educational Facility Planners International argues that "well- constructed buildings can last indefinitely with systematic renovations."[31] Roofs, doors, and windows will need to be replaced as they wear out, but the foundation, walls, and floors of a well-constructed building could last indefinitely without being replaced. As long as historic school buildings are maintained with periodic renovations (every 20 or 30 years), they could last years or even decades longer than a newly constructed building. This is especially the case for pre-World War II buildings which were built with thick walls that provide exceptional stability. They have already survived at least seventy years and will likely be cheaper and easier to maintain than newer buildings constructed with cheaper materials and not intended to last the test of time.

---

[31] Pennsylvania Department of Education et al., ed*., Renovate or Replace? The case for restoring and reusing older school buildings,* http://doczz.net/doc/353227/renovate-or-replace%3F---save-our-land-save-our-towns (accessed November 30, 2016).

Through creative design it should not be a problem to update historic buildings to comply with ADA (Americans with Disabilities Act) requirements, safety and code requirements, and to fit new uses. Interior classroom walls can be removed to make room for different uses. Historic school buildings can also be “greened” during renovation to conserve energy and even save costs annually. Renovation is already more sustainable by using existing materials and infrastructures. Higher ceilings can provide the necessary room for new wiring, ductwork, and energy-efficient fixtures as long as decorative plaster or character-defining features are not obscured.

Combining Tax Credits

Adaptive Reuse becomes an even more financially viable option through the use of tax credits. Historic buildings that are eligible for the National Register of Historic Preservation are applicable for State and Federal Historic Preservation Tax Credits. Projects being adapted to affordable housing may likewise be applicable for the Low-Income Housing Tax Credit (LIHTC). These tax credits may be combined to reduce the costs of adaptive reuse.

Historic Preservation Tax Credits

The Federal Historic Preservation Tax Incentives program incentivizes private investment in the rehabilitation and reuse of historic buildings. The program has influenced over $84 billion in investment to preserve over 42,000

historic properties since it began in 1976.[32] It is administered by the National Park Service (NPS) and the Internal Revenue Service (IRS) in partnership with State Historic Preservation Offices (SHPO). There are multiple types of financial assistance available from the program: the 20% credit, the 10% credit, and tax benefits from historic preservation easements. The 10% credit is used for rehabilitation projects that are non-residential. Since the focus of this report is adaptive reuse for affordable housing, it is less relevant. This report focuses on the 20% credit which is available for "certified historic structures" that are income-producing.

The 20% Federal Historic Preservation Tax Credit enables the owner to reduce their income tax liability by 20% of the cost of qualifying rehabilitation costs. First, it must be determined if a property qualifies for the tax credit. Four factors make up the basic qualifying requirements:

1. Certified Historic Structure
2. Substantial Rehabilitation Test
3. Secretary of Interior's *Standards for Rehabilitation*
4. Income-Producing

A building must qualify as a certified historic structure, meaning it must be individually listed on the National Register of Historic Places or be contributing to a registered historic district. If a building is eligible but not yet listed on the National Register, it may still be applicable. Applicants may request a preliminary

[32] National Park Service, "Tax Incentives for Preserving Historic Properties," *Technical Preservation Services,* https://www.nps.gov/tps/tax-incentives.htm (accessed December 1, 2016).

determination of significance from the National Park Service along with Part 1 of their application.[33] Properties that are over 50 years old are eligible for National Register nomination if they are associated with historic or significant events, persons, architecture, or prehistory and maintain integrity. Integrity refers to the ability of a property to convey its significance. It is evaluated through seven aspects: location, design, setting, materials, workmanship, feeling, and association.[34]

A project must then pass the Substantial Rehabilitation Test. Substantial Rehabilitation means that the total cost of rehabilitation must exceed the pre-rehabilitation book value of the building. It must exceed the greater of $5,000 or the building's adjusted basis. The adjusted basis is equal to the purchase price of the property (both building and land) minus the cost of the land and depreciation, plus the value of any improvements made to the building since the purchase.[35] Once the cost of the rehab is determined to be substantial, the 20% tax credit would be applied to those expenditures that qualify. Expenses that qualify for the Rehabilitation Tax Credit are expenditures for any structural component of a building. Structural components are defined as walls, partitions, floors, ceilings,

---

[33] Technical Preservation Services-National Park Service, *Historic Preservation Tax Incentives,* 2012, https://www.nps.gov/tps/tax-incentives/taxdocs/about-tax-incentives-2012.pdf (accessed December 1, 2016).

[34] U.S. Department of the Interior, National Park Service, *How To Apply The National Register Criteria For Evaluation,* https://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_8.htm (accessed April 15, 2017).

[35] National Park Service, "Eligibility Requirements," *Technical Preservation Services,* https://www.nps.gov/tps/tax-incentives/before-apply/eligibility-requirements.htm (accessed December 1, 2016).

windows, doors, plumbing, electrical, cooling and heating, stairs, sprinkling systems, fire escapes and any components related to operation or maintenance of the building.[36]

Next, the rehabilitation must be completed in accordance with the Secretary of the Interior's *Standards for Rehabilitation*. There are ten standards to ensure the protection of historic character where reasonable and technically and economically feasible. Finally, after rehabilitation, the property must be used for an income-producing purpose for at least five years. This is mainly excluding private residences. Income-producing uses include commercial, industrial, agricultural, and rental residential.[37] The full amount of the rehabilitation tax credit is claimed in the year in which the qualified rehab expenditures are placed in service.[38]

Eligible rehabilitation projects can also use State Historic Tax Credits. The Texas State Historic Tax Credit is equal to 25% of qualifying rehabilitation costs. Applicable buildings include those listed on the National Register of Historic Places, as well as Recorded Texas Historic Landmarks and Texas State Antiquities Landmarks. The program is administered by the Texas Historical Commission (THC) and the Texas Comptroller of Public Accounts. The

---

[36] National Park Service, "Qualified Expenses," *Technical Preservation Services,* https://www.nps.gov/tps/tax-incentives/before-apply/qualified-expenses.htm (accessed December 1, 2016).

[37] National Park Service, "Eligibility Requirements."

[38] National Park Service, "IRS Info- Frequently Asked Questions," *Technical Preservation Services,* https://www.nps.gov/tps/tax-incentives/taxdocs/IRS_HRTC_LIHTC.pdf (accessed May 4, 2017).

requirements for the State Tax Credit are similar to the Federal Historic Preservation Tax Credit. The state program is modeled after the federal program so it is relatively easy to apply for both credits at the same time. In order to be applicable a building must currently have a historic designation, or be determined eligible for listing in the National Register of Historic Places. Historic Designations include National Register properties, recorded Texas historic landmarks, and State Antiquities landmarks. The rehabilitation costs must exceed the minimum threshold of $5,000 and the work must meet the Secretary of the Interior's *Standards for Rehabilitation*. The building also must be placed in use or service after rehabilitation.[39] The Texas State HTC is available not only for projects with income-producing business uses but projects with non-profit business uses as well.

Unlike the Federal HTC, the Texas State HTC is applied to the Texas Franchise Tax because Texas does not have a state income tax. Another difference is that current owners may transfer the Texas State HTC in whole or in part to others. If selling the credit, it is the responsibility of the recipient to organize a private transaction and create a contract for any payment that is involved.[40]

---

[39] Texas Historical Commission, "Texas Historic Preservation Tax Credit Program," *Preservation Tax Incentives,* http://www.thc.texas.gov/preserve/projects-and-programs/preservation-tax-incentives/texas-historic-preservation-tax-credit (accessed December 2, 2016).

[40] Texas Historical Commission, "Comparison of Federal and State Historic Tax Credit Programs," *Preservation Tax Incentives,* http://www.thc.texas.gov/public/upload/publications/tax-credits-comparison-chart.pdf (accessed May 4, 2017).

Low-Income Housing Tax Credit

The Low-Income Housing Tax Credit program was added to the Internal Revenue Code in 1986 to provide an incentive to create and maintain affordable housing. The tax credit offsets the liability of income taxes for eligible participants to help them produce affordable housing. Schwartz explains that "it allows investors to reduce their federal income taxes by $1 for every dollar of tax credit received."[41] The LIHTC is designed to subsidize either 30 percent or 70 percent of the eligible basis of a project. Eligible Basis refers to the total development cost, less land cost and certain other costs.[42] Once the eligible basis is determined it is multiplied by the percentage of low-income units in the development. If the development is located in a "difficult development area" (DDA) or a "qualified census tract" (QCT) the eligible basis may be increased by 30% over the original value of the basis. This is called a "basis boost." DDA's have relatively high housing costs compared to income and QCT's are low-income areas where 50% of households make 60% or below of the regional median family income. Finally the eligible basis is multiplied by the tax credit rate. The 70 percent subsidy is referred to as the automatic 9% tax credit and is generally reserved for new construction. The 30 percent subsidy is referred to as the automatic 4% tax credit and is generally reserved for rehabilitated housing

[41] Alex F. Schwartz, *Housing Policy in the United States* (New York: Routledge, 2015), 135.
[42] Ibid.

and new construction that is financed with tax-exempt bonds.[43] Credits are awarded based on State Qualified Allocation Plans that determine how projects are prioritized. Separate allocations are set aside for “at risk” developments, US Department of Agriculture assisted developments, and non-profit developments. The scoring criteria for credits range from financial feasibility, size and quality of local units, tenant amenities and services, economic community health, and more.[44] Generally, priority is given to projects that provide for the lowest income households and that remain affordable for longer.[45] Each state has additional priorities which are included in their scoring criteria in a document called the Qualified Action Plan. Some of these criteria may limit where credits can be used in ways that affect their potential for use. The 4% credit is also available statewide but is not subject to regional allocation. Tax credits can be claimed annually for a ten year period. The units must be rent restricted and occupied by individuals with incomes below the area median gross income.[46]

The combination of these tax credits could potentially cover a significant portion of qualifying rehabilitation costs. It should be noted that “when the rehabilitation credit is taken, the adjusted basis in the building must be reduced

---

[43] Novogradac & Company LLP, “About the LIHTC,” *Affordable Housing Resource Center,* https://www.novoco.com/resource-centers/affordable-housing-tax-credits/lihtc-basics/about-lihtc (accessed December 2, 2016).

[44] Texas Department of Housing and Community Affairs, “FAQ’s,” *Housing Tax Credit Basics,* https://www.tdhca.state.tx.us/multifamily/faqs-htc-basics.htm (accessed December 2, 2016).

[45] Congressional Research Service, *An Introduction to the Low-Income Housing Tax Credit,* Mark P. Keightley, February 12, 2013, https://fas.org/sgp/crs/misc/RS22389.pdf (accessed January 12, 2017).

[46] Technical Preservation Services-National Park Service, *Historic Preservation Tax Incentives*

by the amount of the credit. In an affordable housing and historic rehabilitation project, the eligible basis for the low-income credit is reduced by the amount of the rehabilitation credit before calculating the low-income credit. However, greater project equity can nonetheless be generated by combining the credits."[47]

[47] William F. Delvac, Susan M. Escherich, and Bridget Hartman, *Affordable Housing Through Historic Preservation: A Case Study Guide to Combining the Tax Credits* (Collingdale, PA: DIANE Publishing, 1995).

Chapter IV: Case Studies

This section of the report highlights four adaptive reuse case studies. I have selected cases in which rehabilitated historic school buildings have been converted into affordable housing as it is the most applicable to Austin's current need for housing and historic building stock. I have also selected those that used a combination of tax credits. Most of them used a combination of the Federal Historic Tax Credit and the Low-Income Housing Tax Credit. The case studies focus on a variety of projects but are all pre-World War II school buildings. A few of them were converted into senior housing. The projects range in size from 8 units to 68 units, but the median size is 19 units. This section will discuss the rehabilitation projects, their financing strategies, challenges, outcomes, and lessons that can be learned from these projects.

There is no shortage of examples of pre- World War II school building conversions. These are clear targets for reuse because of their size, age, and likely historic and architectural significance. However, these studies present a variety of different situations illustrating the broad applicability of adaptive reuse of historic school buildings. The lessons learned can be applied to conversions of more recent post-war school buildings as well.

Sherman Park Commons

Sherman Park Commons, formerly Jackie Robinson Middle School, is an adaptive reuse project in Milwaukee, Wisconsin that created 68 affordable

housing units for seniors. The historic neighborhood school was originally built in 1926 as Peckham Junior High before being renamed as Jackie Robinson Middle School. In 2005 the school closed due to declining enrollment. The Milwaukee Public School district sold the school because it had multiple surplus school properties. The property was purchased for $600,000 by Gorman & Company Inc., a development company that focuses on providing affordable housing through the reuse of historic buildings. A combination of Historic Tax Credits and the Low-Income Housing Tax Credit helped finance the $14.466 million rehabilitation project of the 118,754 square foot school. The project took about a year to complete. The old gymnasium was converted into several units, a hair salon, a nurse's station, and an arts and crafts room for the tenants. Classrooms were converted to housing units, and the old library serves as the main community gathering space. Sherman Park Commons allows tenants to live close to family and friends who reside in the neighborhood. Some tenants even attended the middle school when it was in use and the building brings back memories for them. Many details were preserved to maintain this connection to the heritage and historic character. The interior still has lockers, clocks, and display cases with old school items. Some units even have the original classroom chalkboards in place. Historic signage was also preserved around the school's

exterior and interior.[48] This project illustrates a successful combination of tax credits to provide affordable housing while preserving many historic features and maintaining a building so important to the community and its memories.

Figure 5: Sherman Park Commons

Source: Gorman & Company, Inc.

Shelly School Apartments

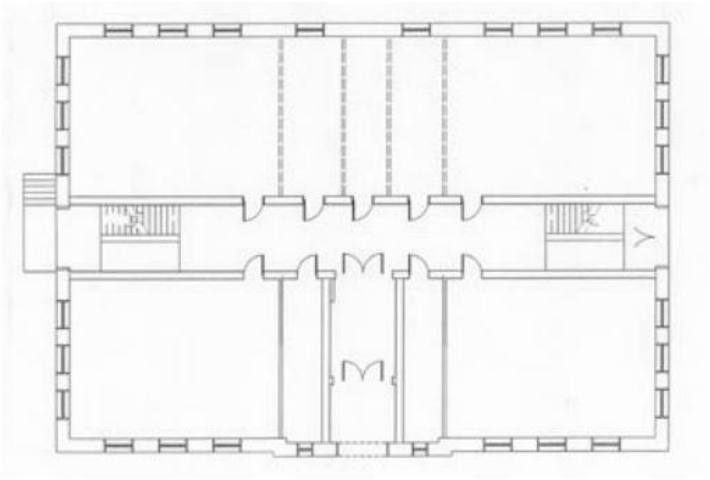
The Shelly School Apartments in West York, Pennsylvania successfully converted two historic school buildings into 17 affordable housing units. The project consisted of the Annex, a historic one-room school building built in 1897 and the William Shelly School built in 1907. Both buildings underwent various renovations and additions in the early 1900s. The school was closed in 1958 and

[48] Gorman & Company, Inc., "Sherman-Park-Commons," Media & News, http://gormanusa.net/tag/sherman-park-commons (accessed January 7, 2017); Donna Kimura, "School Conversions Breathe Life Into Affordable Housing," Multi Family Executive Magazine, July 12, 2012, http://www.multifamilyexecutive.com/design-development/school-conversions-breathe-life-into-affordable-housing_o (accessed January 7, 2017); Lindsay Machak, "Milwaukee Middle School Revived to House Seniors," Multi Family Executive Magazine, July 16, 2014, http://www.multifamilyexecutive.com/design-development/design/milwaukee-middle-school-revived-to-house-seniors_o (accessed January 7, 2017).

sold in 1960 for office and storage use following a district consolidation. The property was purchased in 1997 by PPG Capital Corporation to create 17 low-income apartments: four in the Annex and 13 in the William Shelly School. The building was not on the National Register at the time so PPG partnered with a local non-profit historic preservation association to prepare a report on the site's history and significance. The report was reviewed by the SHPO (State Historic Preservation Office) and approved for nomination for the National Register. Several character defining features were identified which needed to be preserved in order to be eligible for the HTCs. These features included all the original windows, both interior staircases that extended the length of the main building on all floors, wainscoting in both the corridors and classrooms, window and door trim, original classroom doors and transom sash, and light fixtures.[49] The project faced many adaptation issues such as providing ADA accessibility and maintaining the original floor plan that survived a 1919 fire. Through variances and close cooperation and consultation with the SHPO, the building was successfully retrofitted to comply with the various necessary codes and regulations while preserving the significant character defining features on both the interior and exterior.

[49] U.S. Department of the Interior, National Park Service, "Number 3: Shelly School Apartments, West York, Pennsylvania," *Case Studies in Affordable Housing Through Historic Preservation,* October 2005, https://www.nps.gov/tps/tax-incentives/taxdocs/Affordable-Housing-Shelly-School.pdf (accessed December 18, 2016); David Layfield and ApartmentSmart.com Inc., "Shelly School Apartments," *Affordable Housing Online,* https://affordablehousingonline.com/housing-search/Pennsylvania/York/Shelly-School-Apartments/10039908 (accessed December 18, 2016).

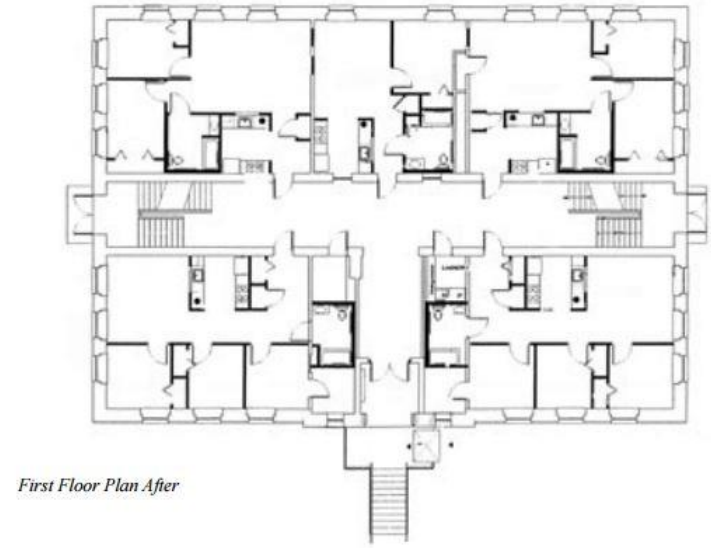
Figure 6: Shelly School First Floor Plan, Before



First Floor Plan before

Source: National Park Service, *Case Studies in Affordable Housing through Historic Preservation*

Figure 7: Shelly School First Floor Plan, After



First Floor Plan After

Source: National Park Service, *Case Studies in Affordable Housing through Historic Preservation*

The total cost of the project including both acquisition and rehabilitation was $1,884,700. The combined LIHTC of $109,160 per year over a ten-year period and total HTC of $303,162 provided the developers with enough incentive that they felt the benefits of this project outweighed the requirements. The project was fully leased within two weeks of opening and provides an affordable housing option for seniors, families, and singles. It also improved the community by bringing new life to two historic buildings that stood vacant for years while filling a neighborhood need. This example also illustrates that although sometimes rehabilitation projects come with numerous challenges, it can still be a feasible and beneficial option with creative solutions and financial assistance from tax credits.

Pillar Place Apartments

Loretto Academy, a large Girl's Catholic High School built in 1908 in St. Louis, Missouri was converted into 19 two to four-bedroom low-income apartments. The building served as a girl's school until the 1970's when it was used as a nursing facility run by nuns. In the early 1990's the Inter Community Housing Associated partnered with the Siedlund Company to adapt the building to Pillar Place Apartments, affordable housing units.

Part of the facility, a large Catholic chapel with stained glass windows, was identified as a character defining feature which must be preserved. It would have proved difficult to convert the chapel into apartments while maintaining its historic character and integrity. It was determined that the chapel was not crucial

for apartment space and it was instead converted into a communal space. The project maintained other features including the main entry leading to the chapel, the large schoolroom windows, and the high ceilings which added a sense of spaciousness to the units. The developers received approval to use secondary hallways for bathrooms and common space, and they faced few difficulties meeting code requirements.

Developers received HTCs to finance the project. However, the HUD Section 8 Moderate Rehabilitation program was used in placed of the LIHTC to subsidize rents for a 15 year period. In this case, Section 8 provided more equity than the LIHTC. The Inter Community Housing Association recognized the need to provide not only affordable housing, but other beneficial services for the community and so established a full-time on site social worker to assist residents in securing daycare, jobs, and education. This project serves as a good example for future conversion because of the determination to preserve character defining features as well as invest in and provide for the community.[50]

[50] Delvac, 53-55; Dan Dillon, *So, Where'd You Go To High School? Vol 2: The Baby Boomer Years: 1950s-1960s* (St. Louis: Virginia Publishing Company, 2005), 108.

Rosa True School

The Rosa True School in Portland, Maine was built in 1844 and served the community until its closure in 1972.[51] At that time it had been in continuous use longer than any school in the United States. By 1990 the school's neighborhood was predominantly low-income with a growing need for affordable housing. In 1992 the Portland West Neighborhood Planning Council worked to convert the school into eight 3-bedroom low-income apartments. Each unit averages about 1,500 square feet. Rosa True School was an ideal affordable housing project partially because of its proximity to downtown and good schools and jobs. It was also already on the National Register of Historic Places which simplified the tax credit application process. Adaptive reuse projects commonly face issues such as reconfiguration of interior space, lead paint, and code compliance. The large classrooms in the Rosa True School, however, were easily adapted to apartments. Lead paint was not an issue because many of the interior elements had been shellacked instead of painted. The developers did face an issue with code compliance. They were required to install fire sprinklers but at the same time preserve the character defining high ceilings in the classroom spaces. They

[51] Delvac, 41-45; David Layfield and ApartmentSmart.com Inc., "Rosa True School," *Affordable Housing Online,* https://affordablehousingonline.com/housing-search/Maine/Portland/Rosa-True-School/10030537 (accessed January 4, 2017); Coastal Enterprises, Inc., "Renovation of Neglected Rosa True School Expands Affordable Housing Options in Portland," *News* http://www.ceimaine.org/news/renovation-neglected-rosa-true-school-expands-affordable-housing-options-portland/ (accessed January 3, 2017).

were able to install sprinklers by only lowering the bathroom and kitchen ceilings while maintaining the classroom ceilings.[52]

The project was partially financed through the combination of HTCs and LIHTC. In fact the resulting cost was lower than other comparable low-income housing projects in the area that did not take advantage of the credits. Compliance with the Secretary of the Interior's *Standards for Rehabilitation* resulted in a 13% lower cost per square foot than comparable projects.[53] The project gained full occupancy within a month of opening. Residents also gained access to Portland West's educational, social services, and recreational opportunities.

Key success factors of this project include developer collaboration with preservationists and affordable housing advocates as well as community participation. It illustrates how well large classrooms translate to apartment layout. This project faced few difficulties in reconfiguring the interior of the building. Where developers did face obstacles, they were able to navigate them through creative design. This example also emphasizes the incentive of utilizing tax credits.

[52] Delvac, 41-45.
[53] Ibid.

Figure 8: Rosa True School

Source: Wikipedia.org

Lessons Learned

Several lessons can be drawn from these case studies and applied to future historic school reuse projects. For example, it is important to think about and preserve the character-defining features of a property not only to maintain the integrity and feel of the building, but also to qualify for historic tax credits. Close collaboration with historic preservationists and the SHPO is necessary for a successful and timely project. Preservationists can help document the conditions of a building, its history, and any character-defining features that need to be preserved in order to comply with the Secretary of the Interior's Standards. The SHPO can also help developers navigate the National Register application process as well as the Historic Tax Credit process.

The case studies also demonstrate the importance of historic schools to the community. It is valuable to collaborate with community members in order to evaluate their wants and needs and avoid pushback on projects. Projects should invest in and improve the community. For instance, the case study projects improved their respective communities by bringing life to vacant buildings, providing housing and social services to low-income families, and allowing seniors in need of affordable housing to reside in the neighborhoods they grew up in near their families.

The case studies also illustrate the ability of schools to be converted to apartments. The large classroom floor plans usually make for relatively easy interior reconfiguration. Large windows let in a lot of natural light, and high ceilings give apartments a more spacious feel. Gymnasiums and libraries can be utilized as community event space. However, each project is different and comes with its own difficulties. But even when challenges arise, they can be overcome with creative solutions and cooperation with the city and SHPO to meet code compliance and rehabilitation standards. Also, the case study projects all utilized a combination of tax incentives. Pursuing tax credits may substantially subsidize a rehabilitation project. Ideally credits incentivize rehabilitation enough to outweigh any issues with the project.

The previously mentioned Pew Charitable Trusts report, *Shuttered Public Schools: The Struggle to Bring Old Buildings New Life,* offers more lessons that can be applied to future projects. For example, school districts should have a

reuse plan in place for surplus properties so they can act quickly when a school is shut down. Districts must pay for maintenance, security, and insurance while they search for new occupants. In addition, buildings that are left vacant are susceptible to deterioration and vandalism. It is easier and less costly to repurpose buildings that have not been closed for long. It is also easier to reuse buildings with roofs and mechanical systems still intact, St. Louis school districts found the most success adapting schools around 40,000 square feet in size. They had more difficulty with those schools greater than 100,000 square feet.[54]

[54] The Pew Charitable Trusts, *Shuttered Public Schools.*

Chapter V: Austin's Potential

Austin has the opportunity to address its affordability issues through adaptive reuse. The majority of AISD school buildings are over 40 years old which means if they are not already eligible for the National Register of Historic Places, they may become eligible in a few years. These projects, where eligible, can use a combination of HTCs and LIHTC to offset the costs of rehabilitation and provide incentive for developers. Currently AISD has a number of surplus properties for which they are accepting bids and proposals including:

- Carruth Administration Center at 1111 West Sixth Street (1991)
- Allan Center at 4900 Gonzalez Street (1957)
- Baker Center at 3908 Avenue B (1911)
- Millett Opera House (aka Austin Club) at 110 East Ninth Street (1878)

AISD has expressed interest in providing affordable housing for their teachers, staff, and students' families and would prefer to choose proposals that benefit the surrounding communities. Three of these properties are more than fifty years old (Allan, Baker, and Millett), and only two are technically former school buildings (Allan and Baker). Of the current options up for bid, the Baker Center is the most obvious choice for preservation and reuse since it is a pre-World War II neighborhood school building and most closely aligns with reuse precedents around the country.

Baker Center

The Baker Center, formerly the Baker Elementary School and Baker Junior High School, is located at 3908 Avenue B in the Hyde Park neighborhood

of Austin, Texas. It is located between West 39th and 40th Streets, south of the Hyde Park Historic District in North Central Austin. The building currently houses the AISD Department of Fine Arts. The 4.361 acre site consists of the main 64,153 square foot school building and two smaller support structures totaling about 1,600 square feet. The main three-story masonry and concrete building was constructed in 1911 with a two-story steel and concrete attached addition that was built in 1952. The school has several classrooms in a variety of sizes, a large cafeteria space, and a kitchen. The building surrounds an outdoor courtyard. The site includes about 81 parking spaces and large protected heritage trees facing Avenue B.

Figure 9: Baker Center

Source: Austin Independent School District

History

The Baker Center was built in 1911 by architects Endress & Walsh. It served as an elementary school for many years as well as a junior high school. At the school's dedication in 1911, University professor Dr. A. Caswell Ellis emphasized the importance of the new facility to the Hyde Park community. He urged residents to make the schoolhouse grounds an anchor of community life. He argued that using the building only for the education of children during the day was a waste considering the investment. School buildings should be used to provide a variety of community services including adult education and training. Ellis said, "The school buildings...do belong to you, the people, and you should protect, beautify, and make the most of your schoolhouses and grounds...Make it the center of the community social life and pleasures."[55] Any new use should respect this original connection to the community.

Condition

The school building itself is in relatively good condition with a few challenges. A 2016 Facility Condition Assessment gave the Baker Center a score of 50 which falls in the "Average" range. The score is equal to 100 minus the Facility Condition Index (FCI). The FCI equals the cost to maintain, repair, and replace deficiencies of a facility divided by the current replacement value of the

[55] "New Baker School Formally Dedicated: Addition to Hyde Park Educational Facilities Plea for a Night School, University Professor Thinks More Use Should Be Made of New Building Than Is Necessary," *The Austin Statesman (1902-1915); Austin, Tex.*, November 25, 1911.

facility.[56] The assessment assigned average scores to most of the main building's elements with poor scores for plumbing, electrical, and exterior windows and stairs. The assessment specifically identifies possible challenges with various elements. For example, some exterior doors are corroded or rusted. Exterior stairs have some cracks in the concrete. Exterior walls show some wear and tear, and the exterior windows are aged. The main building has some water ponding on the roof, and the smaller office building to the rear has extreme water ponding on the roof. On the interior of the building some windows have a cracked and corroded seal. There is a rusted hole in a small portion of the ceiling and a corroded pipe. However, the mechanical/ HVAC systems, elevators, and fire alarms are in good condition.

[56] Austin Independent School District, *Baker Center: 2016 Facility Condition Assessment as of July 2016,* https://www.aecomconnect.com/AISD_FCA/Docs/SpecialCenter/Baker%20Center/AISD_FCA%20Sheet_Baker%20Center_Final.pdf (accessed December 20, 2016).

Table 3: Baker Center Facility Conditions Assessment

Rating Scale

E Excellent G Good A Average P Poor F Fail

	BLDG-945A Main Building	BLDG-PS004 Office Building	BLDG-945C Mechanical Building
Mechanical/HVAC			
Mechanical / HVAC	G	G	G
Domestic Water Distribution	P	G	N/A
Plumbing Fixtures	P	G	N/A
Elevators & Lifts	G	N/A	N/A
Electrical			
Electrical Distribution	P	G	G
Lighting	P	P	A
Communications & Security	A	A	N/A
Fire Alarm	G	G	N/A
Fire Protection / Suppression		N/A	N/A
Exterior Architecture			
Exterior Doors	A	G	P
Exterior Walls	A	P	A
Exterior Windows	P	P	A
Exterior Stairs	P	N/A	N/A
Roofing	A	G	F
Interior Architecture			
Interior Ceiling Finishes	A	G	N/A
Interior Doors	A	A	N/A
Interior Floor Finishes	A	G	G
Interior Walls	P	G	N/A
Interior Wall Finishes	A	G	N/A
Interior Stairs	A	N/A	N/A

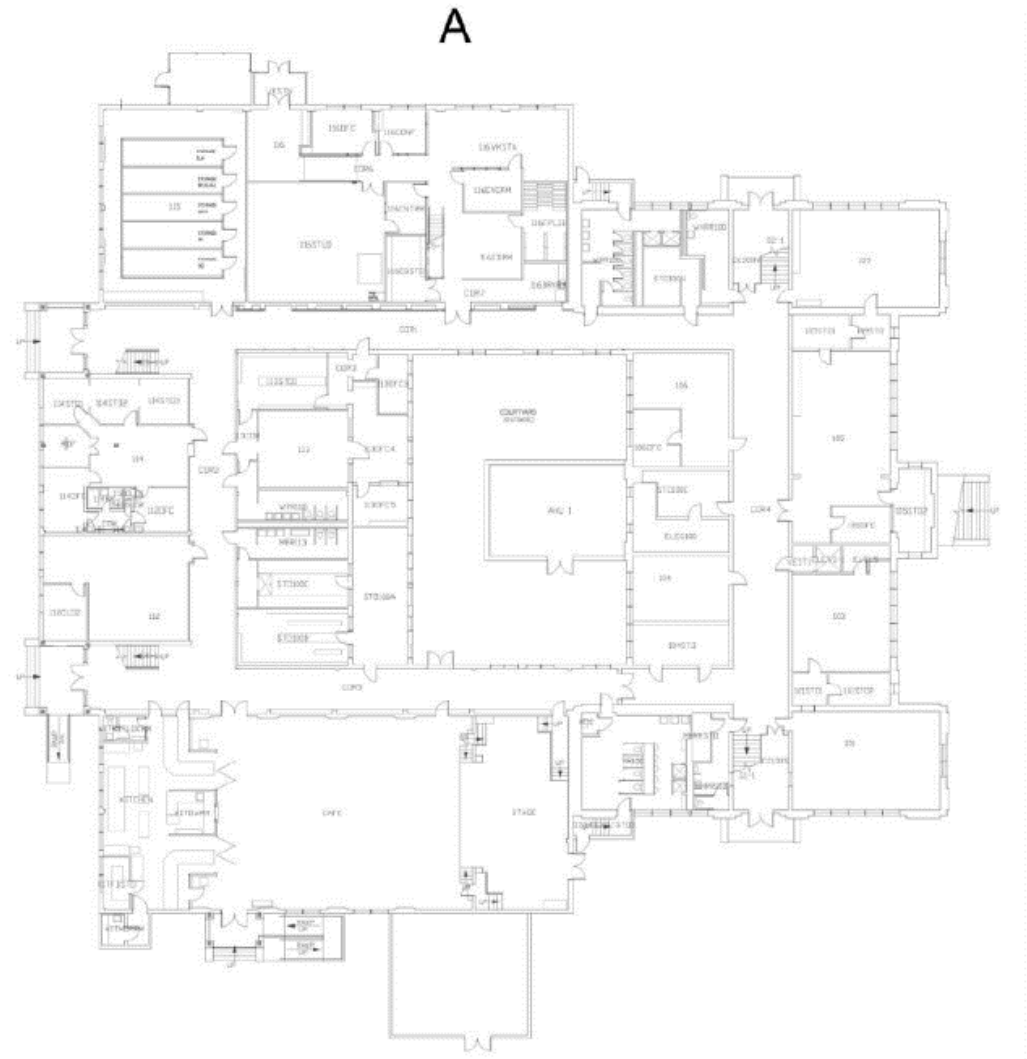
Source: Austin Independent School District

Other Characteristics

Other elements make the building a good opportunity for affordable housing. The Baker Center is in an excellent location in Hyde Park, a block East of Guadalupe St. It is within walking distance of transit, grocery stores, jobs, parks, restaurants and other amenities. The building is also large and spacious providing opportunities for creative interior reconfiguration. The second floor

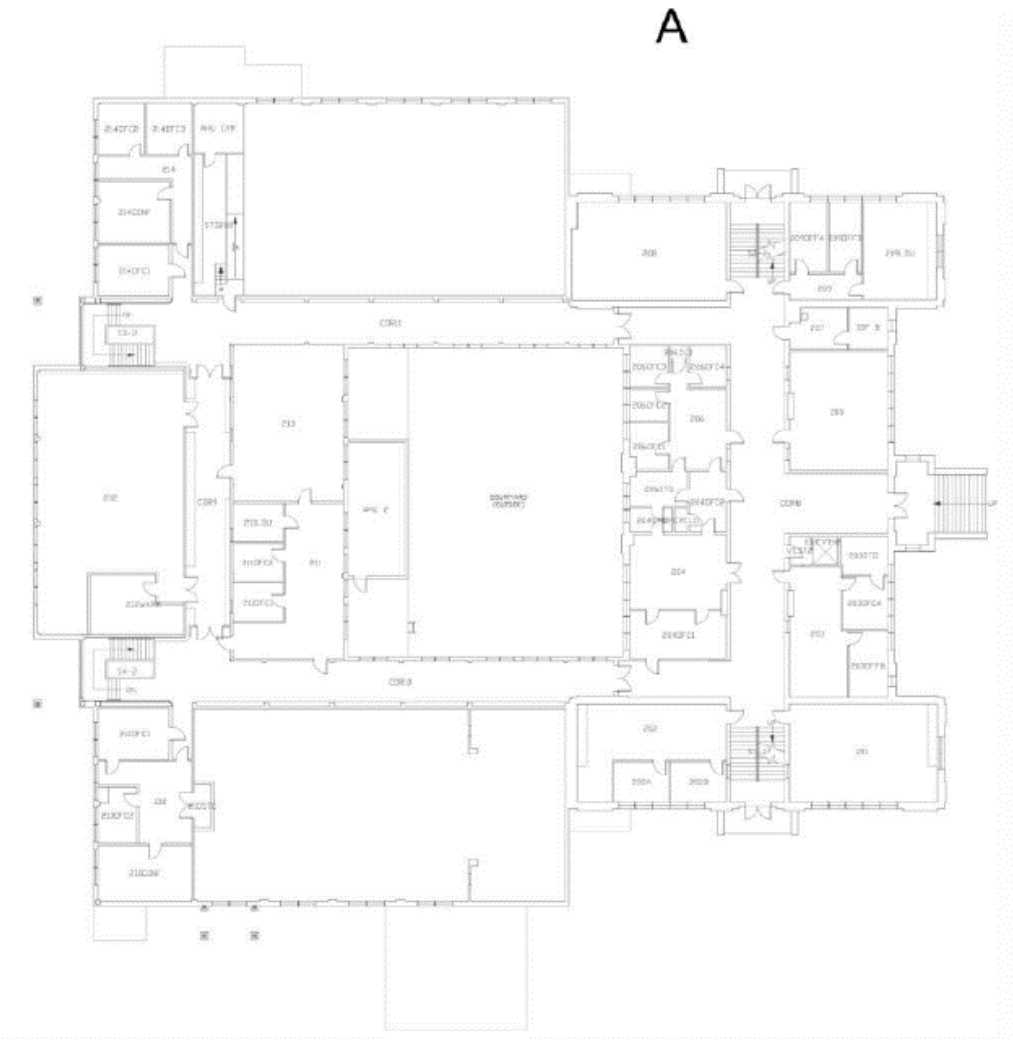
especially has multiple large classrooms that could be subdivided into apartment units. The school also has large windows that provide ample ventilation and natural lighting. It already has elevators that are in good use decreasing any ADA compliance issues.

Figure 10: Baker Center First Floor Plan



Source: Austin Independent School District

Figure 11: Baker Center Second Floor Plan



Source: Austin Independent School District

Figure 12: Baker Center Third Floor Plan

Source: Austin Independent School District

The Baker Center could gain new life as an affordable housing complex. It is in a walkable, neighborhood location close to many amenities. It is in need of some repair, but overall is in average condition. The large, spacious building creates opportunities for interior reconfiguration.

AISD Post-War School Buildings

Although the Baker Center is an ideal option for reuse, it is not a typical Austin school building. Austin Independent School District has a large inventory of older school buildings, but the majority were built after World-War II making them quite stylistically different than the average school building used for reuse projects. However, these differences should not impede their reuse as affordable housing. They share many of the same opportunities as an older school building like Baker. Also, although there are not many examples of post-war school conversions to housing, it has been done before and may likewise be accomplished in Austin.

Inventory and Characteristics

AISD owns over 100 properties, of which 54 are buildings built in 1967 or before, making them at least 50 years old and qualifying them for National Register eligibility. This section of the report focuses on the 40 of these 54 buildings that were built after World War II. AISD also has at least 25 more buildings that will meet the National Register age requirement in the next five to ten years (complete inventory in appendix).

Table 4: Inventory of AISD Properties, 1950-1967

Name	Location	Year Built	Square Footage	Facility Condition Assessment Score
Zilker Elementary School	1900 Bluebonnet Lane	1950	50942	46
Brentwood Elementary School	6700 Arroyo Seco	1951	62890	34
Casis Elementary School	2710 Exposition Blvd	1951	77699	17
Maplewood Elementary School	3808 Maplewood Ave	1951	45389	45
Highland Park Elementary School	4900 Fairview Dr	1952	58557	44
O Henry Middle School	2610 West 10th St.	1953	123205	42
McCallum High School	5600 Sunshine Drive	1953	265022	64
Ridgeview ALC	901 Neal St.	1953	88680	33
Travis High School	1211 E. Oltorf St.	1953	285468	58
Brooke Elementary School	3100 E 4th St	1954	52282	42
Dawson Elementary School	3001 S. First St	1954	55301	58
Joslin Elementary School	4500 Manchaca Rd	1954	45628	52
Reilly Elementary School	405 Denson Drive	1954	41622	42
Allison Elementary School	515 Vargas Rd	1955	61426	44
Harris Elementary	1711 Wheless Lane	1955	56066	63
Wooten Elementary School	1406 Dale St	1955	53689	46
Lamar Middle School	6201 Wynona St.	1955	121593	69
Gullett Elementary School	6310 Treadwell Blvd	1956	39960	42
Sims Elementary School	1203 Springdale Road	1956	44337	50
Allan Facility	4900 Gonzales St.	1957	112679	63
Brown Elementary School	505 W Anderson Lane	1957	53853	14
Pecan Springs Elementary School	3100 Rogge Lane	1957	56992	36
Oak Springs Elementary School	3601 Webberville Road	1958	47102	48
Means YWLA	6401 N. Hampton Drive	1958	132760	49
Ann Richards YWLA	2206 Prather Lane	1958	123686	27
Ortega Elementary School	1135 Garland Ave.	1959	47301	50
St. Elmo Elementary School	600 W. St. Elmo Road	1960	48922	40
Eastside Memorial High School	1012 Arthur Stiles Road	1960	265174	50
Lucy Read Pre-K School	2608 Rich Creek	1961	37232	22
Walnut Creek Elementary School	401 W. Braker Lane	1961	79223	45

Source: Austin Independent School District

Table 4 cont.: Inventory of AISD Properties, 1950-1967

Burnet Middle School	8401 Hathaway St.	1961	138156	67
Webb Middle School & Primary Center	601 E. St. Johns Ave.	1961	120985	52
Andrews Elementary School	6801 Northeast Dr	1962	60032	62
Cunningham Elementary School	2200 Berkeley Ave	1963	61566	48
Barton Hills Elementary School	2108 Barton Hills Drive	1964	38290	59
Blanton Elementary School	5408 Westminster Drive	1964	71817	43
Reagan High School	7104 Berkman Drive	1965	253071	58
Martin Middle School	1601 Haskell St.	1966	108222	43
Lanier High School	1201 Payton Gin Road	1966	282566	62
Murchison Middle School	3700 N Hills Drive	1967	124444	60

Source: Austin Independent School District

The area of the 40 post-war school buildings ranges from 37,232 square feet to 285,468 square feet. The median area is 61,496 square feet. Ten of the school buildings (ranging from about 37,000 s.f to about 48,000 s.f.) are around the 40,000 square foot size recommended by the St. Louis School District. Twenty-six of the buildings are under 100,000 square feet, which the Pew Charitable Trust report recommends for easier conversions. The median Facility Conditions Index is 47 which falls in the “Average” range.[57] Most of the school buildings follow the design trends of the post-war era meaning they are typically single-story, with low-pitched roofs and variations of a finger plan. Finger plan school buildings have spread out corridors off of which classrooms extend,

[57] Austin Independent School District, *Fact Sheets,* https://aecomconnect.com/AISD_FCA/factsheet.html.

courtyards, and direct exterior entry to classrooms.[58] Figure 13 depicts an aerial view of Brooke Elementary School, a typical Austin school built in 1954. Figure 14 is the floor plan of Crow Island School in Illinois, an early example of a finger plan that helped define the modern style of educational architecture. The two share similarities in design with classrooms branching out from central hallways and courtyards in the outdoor spaces created by this layout. 1950's era school buildings also typically have ribbon windows that provide lots of natural light along the outer walls. A standard classroom size is about 24' by 36'.[59]

In a lecture given at the University of Oregon, architect R. Thomas Hille explains the Crow Island School design. Hille states that Carlton Washburne, a progressive educator who oversaw the design of the school, believed that center of the school is the classroom and looked at it in a residential or domestic context. The idea was that the classroom is a home away from home, and it is a self-contained unit. Classrooms would be like houses with their own entry and even their own toilet facility. Everything was localized to the classroom level to add to the autonomy as this self-contained unit.[60] It seems appropriate that if they cannot used as an educational facility, these historic school buildings can now be converted to the use they were meant to resemble.

---

[58] National Clearing House for Educational Facilities, A History of School Design and its Indoor Environmental Standards, 1900 to Today, Lindsay Baker, January 2012, http://www.ncef.org/pubs/greenschoolshistory.pdf (accessed April 5, 2017).

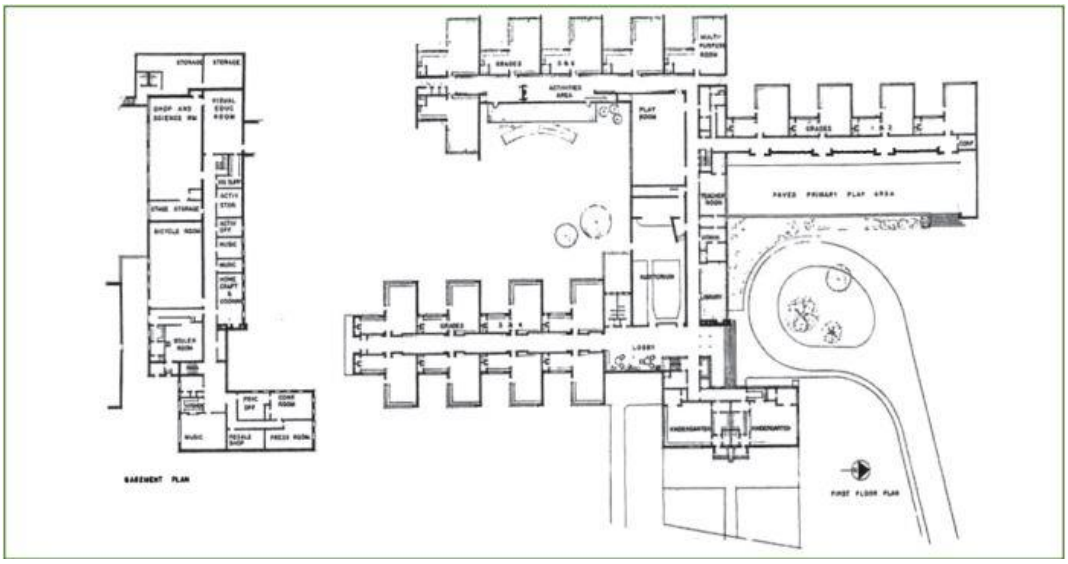
[59] Ibid.

[60] UOregonArchitecture, *Tom Hille Lecture: Modern Schools-A Century of Design for Education,* (October 2011), YouTube video, 1:18:10, Posted May 2013, https://www.youtube.com/watch?v=uZUK4anSAYk.

Figure 13: Aerial View of Brooke Elementary School

Source: Austin Independent School District

Figure 14: Crow Island School Floor Plan



Source: National Clearinghouse for Educational Facilities, *A History of School Design and its Indoor Environmental Standards, 1900 to Today*

Advantages and Disadvantages

Although Austin's post-war school buildings are quite stylistically different than Baker School and other adaptive reuse precedents, they share similar opportunities for conversion into housing. For instance, both the Baker School and Austin's other schools had the same program. They both were used as educational facilities and thus have similar rooms: classrooms, gyms or auditoriums, libraries etc. Also, the area of the Baker School is not much larger than the median area of Austin's post-war schools. They have similar flexibility for the introduction of a new program and the reconfiguration of interior space. Both have the advantage of natural light from many large windows. The main difference is that the Baker School has more stories and higher ceilings. Post-war schools are typically single-floor structures with lower ceilings and low-pitched or flat roofs. However, this can prove to be an advantage because if not already ADA accessible, the single-story schools can be more easily updated. Some might argue that one disadvantage is that schools built after World War II may not be as structurally lasting as a pre-war building like the Baker School. Post-war schools were built using less expensive materials and techniques and were meant to be updated periodically. However, there are other advantages to adapting these schools for affordable housing.

One advantage of post-war school buildings is the finger-plan layout. As previously mentioned, classrooms were designed to mimic the feel of a home

and be able to function as self-contained units. Some school buildings may have individual exterior classroom entries that can act as a means of egress for new housing units. Also, most schools have landscaped space between classrooms that was meant to promote courtyard interactions and community use. This can be a beneficial feature that serves the same purpose for new residents.

The Pew report notes that it is easier to reuse buildings with the roof and mechanical systems intact, and according to Facility Condition Assessments, a majority of Austin's post-war schools received an Average or higher rating on both roof and mechanical/HVAC systems.[61] Additionally, the majority of these schools are less than 100,000 square feet, which according to the Pew report, makes conversions easier. The report also mentions that excessive common space such as wide hallways can pose a problem when introducing a new use because it reduces leasable square footage.[62] However, post-war school buildings with finger plan layouts usually have narrow hallways since the focus is classroom space.

Some might argue that post-war schools are not ideal for affordable housing projects because they are often located in more suburban neighborhoods that are not very walkable. While it is true that Austin's other school buildings are not quite as centrally located as Baker School, they are still in walkable areas away from the periphery. Most are located near major

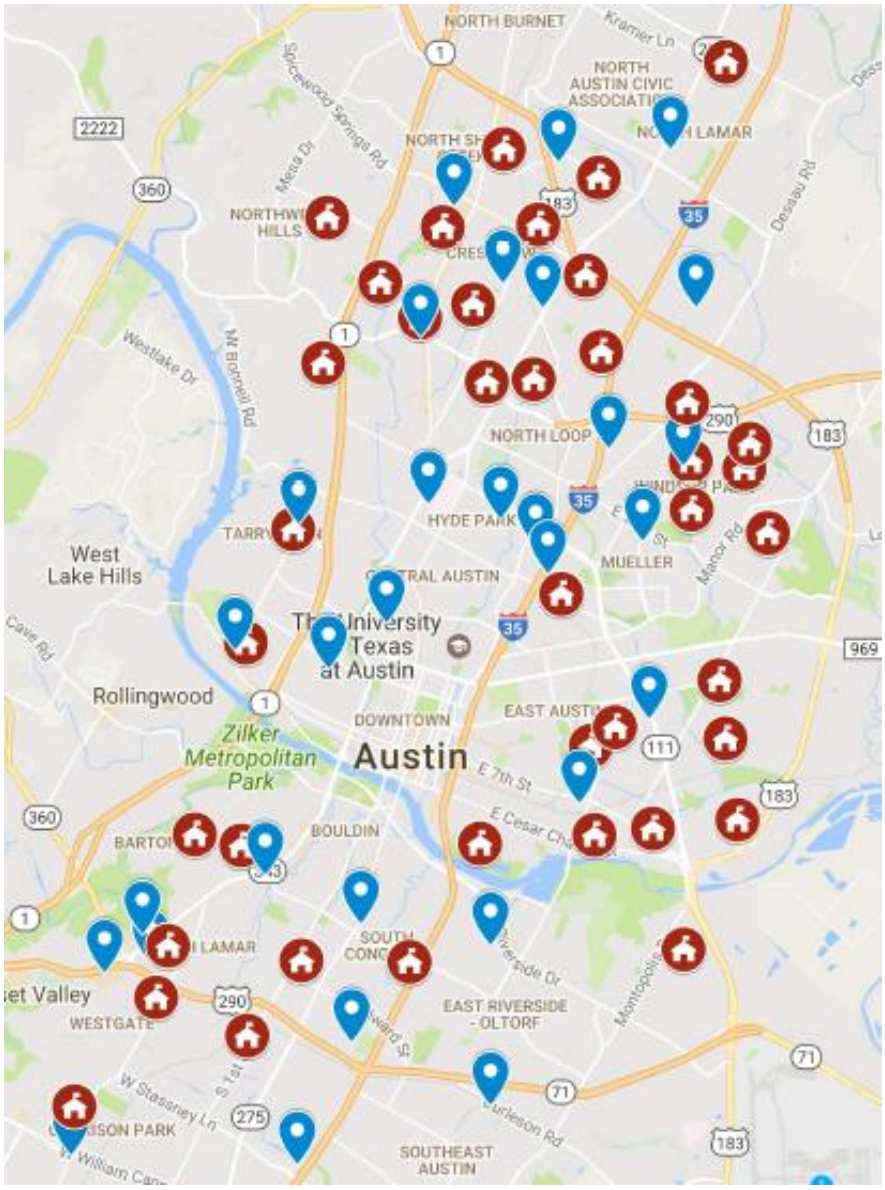
---

[61] Austin Independent School District, *Fact Sheets.*

[62] The Pew Charitable Trusts, *Shuttered Public Schools.*

connections close to public transportation and basic amenities such as grocery stores and drug stores. Table 5 shows the Walk Score, Transit Score, and Bike Score of the neighborhoods in which the school buildings are located. Walk Score is an organization that calculates walkability scores for areas based on proximity to amenities including the categories Dining & Drinking, Groceries, Shopping Errands, Parks, Schools, and Culture & Entertainment. Walk Score also calculates transit score and bike score. The majority of school buildings are located in neighborhoods with scores within the “Somewhat Walkable” range. Only three schools are in “Car-Dependent” neighborhoods. All of the neighborhoods have at least some transit and the bikeability in many of the neighborhoods is excellent. Seventeen neighborhoods scored in the “Excellent” or “Biker’s Paradise” range for bikeability. Affordable housing in these neighborhoods would allow low-income residents to live and work within the city.

Figure 15: Map of AISD Post-War Schools and Nearby Stores



AISD Properties

All items

Grocery Stores/ Drug Stores

All items

Source: Created with Google MyMaps

Figure 16: Walk Score, Transit Score, Bike Score Legend

Walk Score measures the walkability of any address based on the distance to nearby places and pedestrian friendliness.

90–100	**Walker's Paradise** Daily errands do not require a car
70–89	**Very Walkable** Most errands can be accomplished on foot
50–69	**Somewhat Walkable** Some errands can be accomplished on foot
25–49	**Car-Dependent** Most errands require a car
0–24	**Car-Dependent** Almost all errands require a car

Transit Score measures how well a location is served by public transit based on the distance and type of nearby transit lines.

90–100	**Rider's Paradise** World-class public transportation
70–89	**Excellent Transit** Transit is convenient for most trips
50–69	**Good Transit** Many nearby public transportation options
25–49	**Some Transit** A few nearby public transportation options
0–24	**Minimal Transit** It is possible to get on a bus

Bike Score measures whether an area is good for biking based on bike lanes and trails, hills, road connectivity, and destinations.

90–100	**Biker's Paradise** Daily errands can be accomplished on a bike
70–89	**Very Bikeable** Biking is convenient for most trips
50–69	**Bikeable** Some bike infrastructure
0–49	**Somewhat Bikeable** Minimal bike infrastructure

Source: Walk Score, www.walkscore.com

Table 5: AISD Property Walk Scores

Name	Address	Walk Score	Transit Score	Bike Score
Zilker Elementary School	1900 Bluebonnet Lane	57	44	87
Brentwood Elementary School	6700 Arroyo Seco	59	46	75
Casis Elementary School	2710 Exposition Blvd	61	28	64
Maplewood Elementary School	3808 Maplewood Ave	63	49	92
Highland Park Elementary School	4900 Fairview Dr	54	28	64
O Henry Middle School	2610 West 10th St.	61	36	69
McCallum High School	5600 Sunshine Drive	60	51	74
Ridgeview ALC	901 Neal	62	50	84
Travis High School	1211 E. Oltorf St.	47	48	55
Brooke Elementary School	3100 E 4th St	68	46	90
Dawson Elementary School	3001 S. First St	62	48	76
Joslin Elementary School	4500 Manchaca Rd	66	50	67
Reilly Elementary School	405 Denson Drive	67	54	97
Allison Elementary School	515 Vargas Rd	50	40	66
Harris Elementary	1711 Wheless Lane	67	41	72
Wooten Elementary School	1406 Dale St	64	55	71
Lamar Middle School	6201 Wynona St.	72	42	79
Gullett Elementary School	6310 Treadwell Blvd	33	39	59
Sims Elementary School	1203 Springdale Road	50	44	72
Allan Facility	4900 Gonzales St.	55	42	72
Brown Elementary School	505 W Anderson Lane	66	56	62
Pecan Springs Elementary School	3100 Rogge Lane	48	41	52
Oak Springs Elementary School	3601 Webberville Road	66	48	78
Means YWLA	6401 N. Hampton Drive	35	39	48
Ann Richards YWLA	2206 Prather Lane	63	49	69
Ortega Elementary School	1135 Garland Ave.	24	44	41
St. Elmo Elementary School	600 W. St. Elmo Road	51	49	57
Eastside Memorial High School	1012 Arthur Stiles Road	24	33	33
Lucy Read Pre-K School	2608 Rich Creek	56	47	55
Walnut Creek Elementary School	401 W. Braker Lane	50	41	53
Burnet Middle School	8401 Hathaway St.	53	48	65
Webb Middle School & Primary Center	601 E. St. Johns Ave.	66	50	70
Andrews Elementary School	6801 Northeast Dr	24	37	28
Cunningham Elementary School	2200 Berkeley Ave	60	37	60
Barton Hills Elementary School	2108 Barton Hills Drive	39	39	54
Blanton Elementary School	5408 Westminster Drive	58	42	71
Reagan High School	7104 Berkman Drive	38	44	50
Martin Middle School	1601 Haskell St.	68	49	91
Lanier High School	1201 Payton Gin Road	51	49	66
Murchison Middle School	3700 N Hills Drive	70	36	68

Source: Walk Score, www.walkscore.com

Eligibility

As with older school buildings, post-war schools may be eligible for tax-credits. A building must be a certified historic structure, which includes National Register properties, to qualify for HTCs. Historic properties over 50 years old are eligible for National Register nomination, thus as of 2017 buildings built before 1967 meet the age requirement. Properties must also be associated with historic or significant events, persons, architecture, or prehistory. Austin school buildings may meet this requirement as well. Similar school buildings can be found on the National Register. For instance, Northside Elementary School in Oklahoma, built in 1957, was nominated for significance in Architecture and Education. It is also a one-story finger plan building. Parkside Elementary School in Oklahoma, built in 1955, is another finger plan school nominated for architectural significance.[63] With their similar design elements, Austin school buildings can likewise be nominated for architectural significance.

These school buildings may also qualify for LIHTC. Many of the school buildings are in fact located in current Qualified Census Tracts.[64] This means projects would be eligible for a 130% basis boost and developers would get more value from their credits. However, considering that QCT's are low-income areas,

---

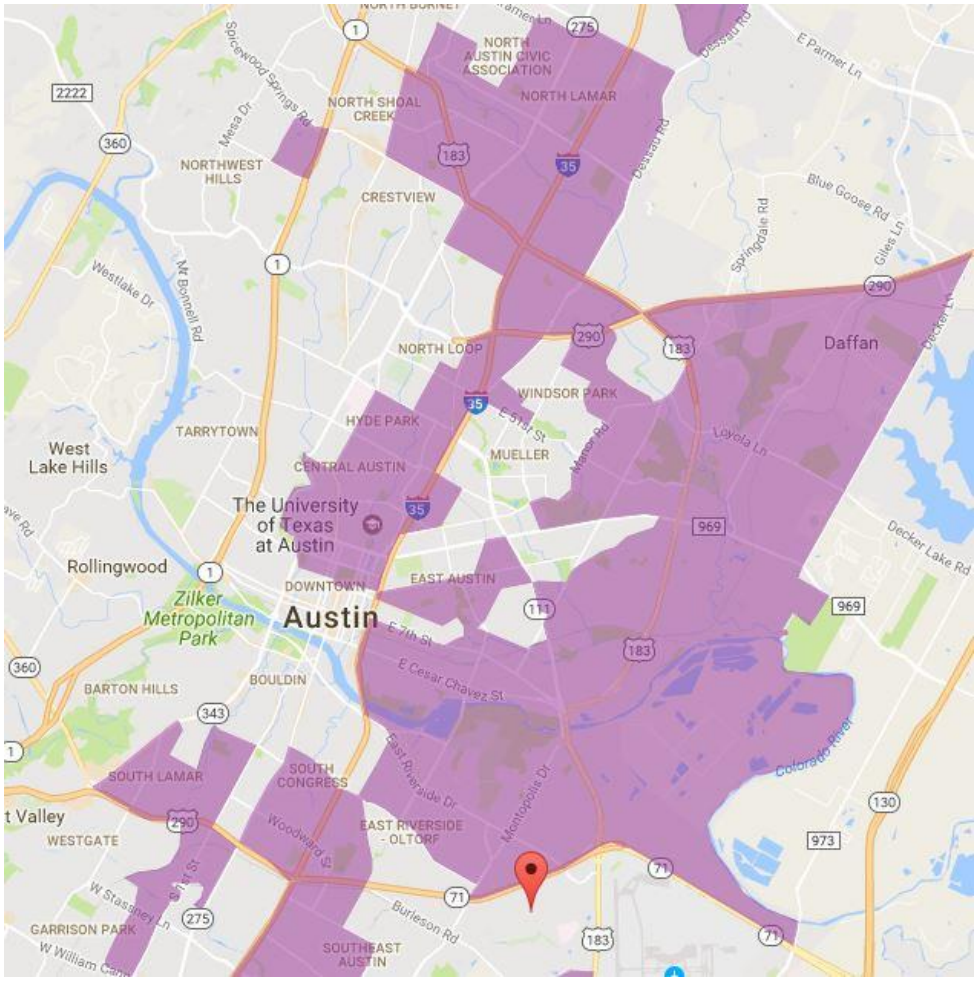
[63] National Park Service, "Digital Archive on NPGallery," *National Register of Historic Places*, https://npgallery.nps.gov/nrhp (accessed April 12, 2017).

[64] U.S. Department of Housing and Urban Development, Office of Policy Development and Research, *2016 and 2017 Small DDA's and QCT's*, https://www.huduser.gov/portal/sadda/sadda_qct.html (accessed April 15, 2017).

it is important for any affordable housing project to be part of a larger neighborhood revitalization effort.

It should be noted that QCT's are determined annually and may be subject to change. If a school closes and the area is no longer a QCT, it may be due to gentrification pressure that makes the neighborhood unaffordable for many current residents. In this case, an adaptive reuse project that provides affordable housing would be beneficial to allow low-income people continued access to the neighborhood. AISD and developers should look at city trends and prioritize projects in those areas susceptible to change.

Figure 17: Map of 2017 Qualified Census Tracts in Austin



Source: U.S. Department of Housing and Urban Development

Precedents

There are not many prevalent examples of the adaptive reuse of post-war school buildings. There are even fewer examples of post-war schools that have specifically been converted into housing. However, it has been done before. This section of the report highlights two cases of post-war school conversion projects. Sources and information were limited, but these were nonetheless included to

demonstrate the applicability and possibility of adaptive reuse of post-war schools into housing.

Homeroom Commons

In 2013 Schoeneck Elementary School in Lancaster County, Pennsylvania was converted into Homeroom Commons. The 19,000 square foot, single-story structure was built in 1955. Not long after the school district voted to close the school, the building was purchased by developer, Moyer Ziegler Partnership and converted into the 17-unit apartment complex. Apartments range from 800 to 1,200 square feet. Homeroom Commons also features extensive green space and a community room. This project, however, was privately funded and did not utilize tax credits.[65]

Figure 18: Schoeneck Elementary School

Source: Lancaster Online

[65] Paula Wolf, "Former Schoeneck Elementary School has been turned into apartments, with some school touches left," Lancaster Online, March 9, 2013, http://lancasteronline.com/features/former-schoeneck-elementary-school-has-been-turned-into-apartments-with/article_f2adf28f-ab4a-5abc-89a5-f1a440f29553.html (accessed April 20, 2017).

Richland School Apartments

Richland School in Richland, Oregon was built in two phases in 1958 and 1963. It included two wings of classrooms, a gym, cafeteria, and library. Pinnacle Architects saw a need in the community for affordable housing for older residents that would otherwise be forced to move from their hometowns. Pinnacle recognized an opportunity in the shuttered Richland School and converted the classrooms into seven 1-bedroom units and three 2-bedroom units for senior and disabled housing. The complex also has a community center and public meeting space.

From the beginning, Pinnacle worked with the community, the local planning department and the Northeast Oregon Housing Authority to ensure the project went smoothly. They were able to use a combination of grants and tax credits including the Oregon Affordable Housing Tax Credit. Pinnacle also preserved key design features of the building including the large windows and outdoor roof overhangs.[66]

Both the Schoeneck Elementary School and the Richland School share similar design elements with Austin schools. They are both 1950's era single-story school buildings with long, low finger plan layouts, many windows, and courtyard areas. Although they do not resemble the most common adaptive

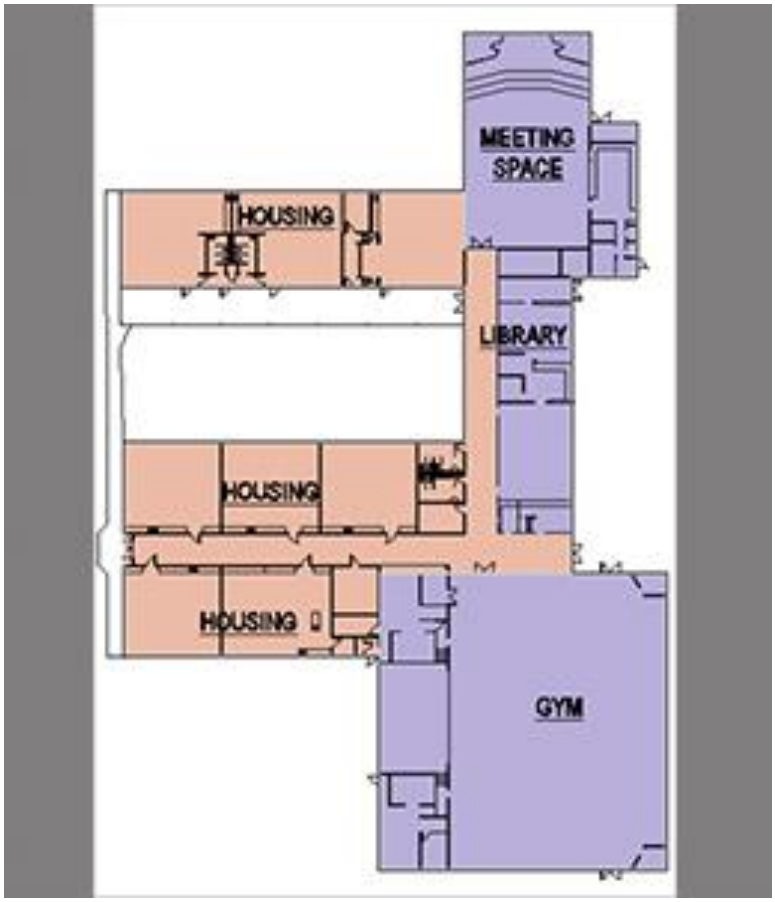
[66] Northeast Oregon Housing Authority, "Richland Senior Housing and Community Center," *Richland School Apartments*, https://neoha.org/2015/09/02/richland-school-apartments/ (accessed April 19, 2017).

reuse projects, both were successfully reconfigured into apartment complexes. They serve as models of what Austin can someday accomplish with its own historic building stock.

Figure 19: Richland School

Source: Northeast Oregon Housing Authority

Figure 20: Richland School Apartments Floor Plan



Source: Northeast Oregon Housing Authority

Chapter VI: Conclusion

Austin Independent School District is presented with an opportunity to help not only its families and teachers but the surrounding area affected by Austin's affordability issues. Austin has insufficient affordable housing for its citizens, and using the school district's vacant or surplus historic resources to meet this need is not only a logical but a viable option. Affordable housing would benefit numbers of low-income families currently spending more than they can afford. Adaptive reuse of historic buildings into housing is an opportune combination because not only are two goals being met, but projects may be eligible for both HTCs and LIHTC for financial assistance.

Recommendations

The Baker School is an obvious choice for a historic adaptive reuse project due to its architectural features, historic community significance, location, and overall condition. The building is not currently on the National Register of Historic Places, but would most likely be eligible for nomination considering these factors. Those interested in adaptive reuse of the Baker School should pursue financial assistance in the form of applicable tax credits. Nomination would help make the project eligible for the 20% Federal Historic Tax Credit and the 25% Texas State Historic Tax Credit. These in combination with the 9% Low-Income Housing Tax Credit would increase project equity and hopefully incentivize the rehabilitation to outweigh the issues and requirements of rehabilitation. Reusing the school to provide much needed housing and possibly social and educational

services could help fulfill its intended purpose and maintain its ties to the community.

Since most AISD properties are older than 40 years, as they age and go out of use, this process of adaptive school building reuse can be continually used as an additional tool for Austin to meet its housing goals. By the time a school becomes vacant it will be well within the age requirements for the National Register and can become eligible for listing and tax credits.

AISD should begin early and create a plan for the reuse of surplus properties. It is important to act quickly in order to minimize the costs of letting a building sit vacant. AISD should try to get eligible schools nominated for the National Register so that if and when the time comes to reuse a building, they will be prepared to move forward at once and secure financial assistance. This can be accomplished first by working with preservationists to document the history, condition, and character-defining features of the school that would likely need to be preserved in accordance with the Secretary of Interior's *Standards for Rehabilitation*. Then, developers can utilize a combination of tax credits to cover the costs of rehabilitation.

It is key that AISD and future developers collaborate with various groups including preservationists, affordable housing advocates, city planners and staff, and community members in order to achieve success. Preservationists and the SHPO can help to begin the documentation and nomination process. The SHPO can also help with the HTC application process.

AISD should work with affordable housing advocates and seek out developers that want to be part of a larger revitalization project should the school be located in a low-income neighborhood. It would also be beneficial for AISD to communicate with city planners and refer to city resources such as Imagine Austin's Susceptibility to Change maps in order to identify city trends and rapidly changing areas. Then the district could prioritize projects in areas that would provide the most benefit to gentrifying neighborhoods. The city can also help if a project faces compliance issues during the design process. AISD and developers should consult the community to assess their wants and needs for the site to avoid pushback like in the case of the Allan School. Collaboration between developers, local preservationists, the SHPO, affordable housing advocates, and the community helped the Shelly School Apartments and the Rosa True School Apartments be successful and could likewise help future Austin projects.

A project program should reflect not only community needs but the historic character and use of the building. The Baker School for instance, has historically been an anchor of the community and was intended to provide beneficial services to the residents. Affordable housing would be beneficial but could also be paired with some kind of community gathering space or provide social services such as those in the case of Rosa True School in Portland, Maine.

Austin has a rich inventory of historic neighborhood schools the majority of which were built after 1950. While adaptive reuse of 100-year old schools buildings is a relatively common preservation practice, it is not very common to

repurpose modern, post-war school buildings. However, these school buildings share most of the same advantages and opportunities for affordable housing. Lessons learned from more traditional reuse projects across the country could easily be applied to Austin's stock of historic schools. As more and more historic neighborhood schools become vacant, AISD has the opportunity to preserve these cultural resources so significant to local communities while addressing the growing affordability problem in the city. Austin could pave the way for other cities across the country to increase their affordable housing through preservation.

Appendix A: Inventory of AISD Properties

Name	Location	Year Built	Square Footage	Facility Condition Assessment Score
Pease Elementary School	1106 Rio Grande	1876	35704	43
Blackshear Elementary School	1712 East 11th St.	1903	70610	58
Fulmore Middle School	201 E. Mary St.	1911	159770	57
Baker Center	3908 Avenue B	1911	64153	50
Mathews Elementary School	906 West Lynn St	1916	42124	42
Becker Elementary School	906 W Milton St	1936	59669	44
Zavala Elementary School	310 Robert Martinez Jr. St.	1937	69463	43
Travis Heights Elementary School	2010 Alameda Drive	1938	59658	55
Bryker Woods Elementary School	3309 Kerbey Lane	1939	37511	47
Lee Elementary	3308 Hampton Rd	1939	46328	50
Ridgetop Elementary School	5005 Caswell Ave.	1939	34839	63
Garza Independence High School	1600 Chicon St.	1939	46233	59
Rosedale School	2117 W. 49th St	1939	36501	32
Govalle Elementary School	3601 Govalle Ave	1940	77368	63
Zilker Elementary School	1900 Bluebonnet Lane	1950	50942	46
Brentwood Elementary School	6700 Arroyo Seco	1951	62890	34
Casis Elementary School	2710 Exposition Blvd	1951	77699	17
Maplewood Elementary School	3808 Maplewood Ave	1951	45389	45
Highland Park Elementary School	4900 Fairview Dr	1952	58557	44
O Henry Middle School	2610 West 10th St.	1953	123205	42
McCallum High School	5600 Sunshine Drive	1953	265022	64
Ridgeview ALC	901 Neal	1953	88680	33
Travis High School	1211 E. Oltorf St.	1953	285468	58
Brooke Elementary School	3100 E 4th St	1954	52282	42
Dawson Elementary School	3001 S. First St	1954	55301	58
Joslin Elementary School	4500 Manchaca Rd	1954	45628	52
Reilly Elementary School	405 Denson Drive	1954	41622	42
Allison Elementary School	515 Vargas Rd	1955	61426	44
Harris Elementary	1711 Wheless Lane	1955	56066	63
Wooten Elementary School	1406 Dale St	1955	53689	46
Lamar Middle School	6201 Wynona St.	1955	121593	69
Gullett Elementary School	6310 Treadwell Blvd	1956	39960	42
Sims Elementary School	1203 Springdale Road	1956	44337	50
Allan Facility	4900 Gonzales St.	1957	112679	63
Brown Elementary School	505 W Anderson Lane	1957	53853	14
Pecan Springs Elementary School	3100 Rogge Lane	1957	56992	36
Oak Springs Elementary School	3601 Webberville Road	1958	47102	48
Means YWLA	6401 N. Hampton Drive	1958	132760	49
Ann Richards YWLA	2206 Prather Lane	1958	123686	27

Ortega Elementary School	1135 Garland Ave.	1959	47301	50
St. Elmo Elementary School	600 W. St. Elmo Road	1960	48922	40
Eastside Memorial High School	1012 Arthur Stiles Road	1960	265174	50
Lucy Read Pre-K School	2608 Rich Creek	1961	37232	22
Walnut Creek Elementary School	401 W. Braker Lane	1961	79223	45
Burnet Middle School	8401 Hathaway St.	1961	138156	67
Webb Middle School & Primary Center	601 E. St. Johns Ave.	1961	120985	52
Andrews Elementary School	6801 Northeast Dr	1962	60032	62
Cunningham Elementary School	2200 Berkeley Ave	1963	61566	48
Barton Hills Elementary School	2108 Barton Hills Drive	1964	38290	59
Blanton Elementary School	5408 Westminster Drive	1964	71817	43
Reagan High School	7104 Berkman Drive	1965	253071	58
Martin Middle School	1601 Haskell St.	1966	108222	43
Lanier High School	1201 Payton Gin Road	1966	282566	62
Murchison Middle School	3700 N Hills Drive	1967	124444	60
Barrington Elementary School	400 Cooper Drive	1969	66046	60
Norman Elementary	4001 Tannehill Lane	1969	58519	50
Pillow Elementary	3025 Crosscreek Drive	1969	54247	61
Wooldridge Elementary School	1412 Norseman Terrace	1969	70474	65
Crockett High School	5601 Manchaca Road	1969	336603	64
Doss Elementary School	7005 Northledge Dr	1970	61102	47
Hill Elementary School	8601 Tailwood Drive	1970	69626	52
Oak Elementary School	1010 Turtle Creek Blvd.	1970	61009	34
Winn Elementary School	3500 Susquehanna Lane	1970	62087	46
Sunset Valley Elementary School	3000 Jones Rd.	1971	66467	49
Graham Elementary School	11211 Tom Adams Dr	1972	70590	58
Linder Elementary School	2800 Metcalfe Rd	1972	69544	37
Bedichek Middle School	6800 Bill Hughes Road	1972	133942	49
Dobie Middle School & Pre-K Center	1200 E Rundberg Lane	1973	133303	48
Anderson High School	8403 Mesa Drive	1973	323935	81
Cook Elementary School	1511 Cripple Creek Dr	1974	67355	39
Oak Hill Elementary School	6101 Patton Ranch Road	1974	75775	40
Johnson (LBJ) High School & LASA	7309 Lazy Creek Drive	1974	293663	67
Menchaca Elementary School	12120 Manchaca Road	1975	60104	32
Austin High School	1715 W. Cesar Chavez St.	1975	340540	61
Houston Elementary School	5409 Ponciana Drive	1976	81206	53
Sanchez Elementary School	73 San Marcos St.	1976	77905	42
Williams Elementary School	500 Mairo St.	1976	64846	42
Burger Center	3200 Jones Rd	1977	180614	62
Clifton Career Center	1519 Coronado Hills Dr	1977	38314	70
Langford Elementary School	2206 Blue Meadow Drive	1980	78250	63

Cliffton Warehouse	3701 Woodbury Dr.	1983	116305	61
Pleasant Hill Elementary School	6405 Circle S Road	1985	65298	38
Boone Elementary School	8101 Croftwood Dr	1986	73690	66
Kocurek Elementary School	9800 Curlew Dr	1986	78705	58
Patton Elementary School	6001 Westcreek Drive	1986	76439	52
Summitt Elementary School	12207 Brigadoon Lane	1986	75903	59
Widen Elementary School	5605 Nuckols Crossing	1986	74523	62
Covington Middle School	3700 Convict Hill Road	1986	173867	52
Kealing Middle School	1607 Pennsylvania Ave.	1986	192768	79
Palm Elementary School	7601 Dixie Drive	1987	79082	44
Mendez Middle School	5106 Village Square Dr.	1987	173382	55
Bowie High School	4103 W. Slaughter Lane	1988	422688	64
Galindo Elementary School	3800 S. Second St	1989	85369	64
Carruth Admin Center	1111 W 6th St	1991	134402	54
Campbell Elementary School	2613 Rogers Ave	1992	61793	63
Jordan Elementary School	6711 Johnny Morris Rd	1992	74920	66
Kiker Elementary School	5913 La Crosse Ave	1992	75595	70
Davis Elementary	5214 Duval Rd	1993	72150	78
Metz Elementary	84 Robert T. Martinez Jr. St.	1993	61905	59
Bailey Middle School	4020 Lost Oasis Hollow	1993	149970	63
Casey Elementary School	9400 Texas Oaks Dr	1998	81506	34
Hart Elementary School	8301 Furness St	1998	81042	57
Mills Elementary School	6201 Davis Lane	1998	81369	64
Baranoff Elementary School	12009 Buckingham Gate Rd	1999	80088	60
Cowan Elementary School	2817 Kentish Dr	1999	70234	35
McBee Elementary School	1001 West Braker	1999	69716	52
Rodriguez Elementary School	4400 Franklin Park Drive	1999	79918	56
Small Middle School	4801 Monterey Oaks Blvd.	1999	158395	62
Paredes Middle School	10100 S. Mary Moore Searight Dr.	2000	149205	80
Akins High School	10701 S. First St.	2000	346839	60
Pickle Elementary School	1101 Wheatley Ave.	2001	120862	56
Delco Activity Center	4601 Pecan Brook Dr.	2003	60294	33
Clayton Elementary School	7525 La Crosse Ave	2006	102295	73

Bibliography

Austin Independent School District. “Austin ISD Releases Demographic Report.” *Press Releases.* https://www.austinisd.org/articles/austin-isd-releases-demographic-report (accessed May 4, 2017).

---. *Baker Center: 2016 Facility Condition Assessment as of July 2016.* https://www.aecomconnect.com/AISD_FCA/Docs/SpecialCenter/Baker%20Center/AISD_FCA%20Sheet_Baker%20Center_Final.pdf (accessed December 20, 2016).

---. *Fact Sheets.* https://aecomconnect.com/AISD_FCA/factsheet.html.

Blandy, Doug. “Editorial: Memory, Loss, and Neighborhood Schools.” *Studies in Art Education* 49, no. 2 (2008): 83–86.

City of Austin. *Austin Strategic Housing Plan Draft.* June 6, 2016. http://www.austintexas.gov/sites/default/files/files/Draft_Austin_Housing_Plan_06.06.16__2_.pdf (accessed January 7, 2017).

---. *Draft Resolution.* http://www.austintexas.gov/edims/document.cfm?id=267922.

City of Lafayette. “12 Economic Benefits of Historic Preservation.” *Historic Preservation.* http://www.lafayette.in.gov/190/12-Economic-Benefits-of-Historic-Preserv (accessed December 12, 2016).

Coastal Enterprises, Inc. “Renovation of Neglected Rosa True School Expands Affordable Housing Options in Portland.” *News.* http://www.ceimaine.org/news/renovation-neglected-rosa-true-school-expands-affordable-housing-options-portland/ (accessed January 3, 2017).

Congressional Research Service. *An Introduction to the Low-Income Housing Tax Credit.* Mark P. Keightley. February 12, 2013. https://fas.org/sgp/crs/misc/RS22389.pdf (accessed January 12, 2017).

Delvac, William F., Susan M. Escherich, and Bridget Hartman. *Affordable Housing Through Historic Preservation: A Case Study Guide to Combining the Tax Credits.* Collingdale, PA: DIANE Publishing, 1995.

The Des Moines Register. *Iowa Lost Schools.* http://www.desmoinesregister.com/topic/cca0dde2-d6a2-4899-859d-ea519e48f6a3/iowa-lost-schools/ (accessed December 29, 2016).

Dillon, Dan. *So, Where'd You Go To High School? Vol 2: The Baby Boomer Years: 1950s-1960s.* St. Louis: Virginia Publishing Company, 2005.

Dowdall, Emily. "Why Vacant Schools Still Sit Empty: A look at 11 shuttered Philadelphia schools and others around the country." *The Pew Charitable Trusts.* http://www.pewtrusts.org/en/research-and-analysis/analysis/2015/10/06/why-vacant-schools-still-sit-empty (accessed December 12, 2016).

Eldredge, Barbara. "What is Gentrification, Anyway?" *Brownstoner.* http://www.brownstoner.com/brooklyn-life/what-is-gentrification-definition-causes-effects/ (accessed March 3, 2017).

Glasmeier, Amy K. and the Massachusetts Institute of Technology. "Living Wage Calculator for Travis County, Texas." *Living Wage Calculator.* http://livingwage.mit.edu/counties/48453 (accessed January 20, 2017).

Gorman & Company, Inc. "Sherman-Park-Commons." *Media & News.* http://gormanusa.net/tag/sherman-park-commons (accessed January 7, 2017).

Hamilton, Caity. "A New Life for Old Schools: Support for the Adaptive Reuse of Abandoned Historic School Buildings." Master's Thesis, Savannah College of Art and Design, 2013.

Harvey, Todd, Desiree Espinoza, Jeremy Hays, Julia Friskin, B. D. Howard, Chris Huynh, Pitch Pengasawat, Eathen Guss, George Kao, Lisa Russ, Jonathan Fearn, Radhika Kunamneni, Egon Terplan, Jonathan Lau, and Bao-Tran Truong. "Gentrification and West Oakland: Causes, Effects, and Best Practices." City and Regional Planning coursework, University of California, Berkeley, 1999.

Jaeger, Kyle. "Here's How Many Hours You Need to Work to Pay Rent in Every State." ATTN:. January 02, 2016. http://www.attn.com/stories/4920/united-states-minimum-wage-and-rent (accessed November 30, 2016).

Johnson, Matthew. "Stepping Up: How Cities are Working to Keep America's Poorest Families Housed." *Urban Institute.* June 16, 2015.

http://www.urban.org/features/stepping-how-cities-are-working-keep-americas-poorest-families-housed (accessed November 3, 2016).

Kimura, Donna. “School Conversions Breathe Life Into Affordable Housing.” *Multi Family Executive Magazine.* July 12, 2012. http://www.multifamilyexecutive.com/design-development/school-conversions-breathe-life-into-affordable-housing_o (accessed January 7, 2017).

Layfield, David and ApartmentSmart.com Inc. “Rosa True School.” *Affordable Housing Online.* https://affordablehousingonline.com/housing-search/Maine/Portland/Rosa-True-School/10030537 (accessed January 4, 2017).

---. “Shelly School Apartments.” *Affordable Housing Online.* https://affordablehousingonline.com/housing-search/Pennsylvania/York/Shelly-School-Apartments/10039908 (accessed December 18, 2016).

Machak, Lindsay. “Milwaukee Middle School Revived to House Seniors.” *Multi Family Executive Magazine.* July 16, 2014. http://www.multifamilyexecutive.com/design-development/design/milwaukee-middle-school-revived-to-house-seniors_o (accessed January 7, 2017).

McGivern, Kylie. “AISD, City, County Collaborate to Identify Land for Affordable Housing.” KXAN, October 13, 2016. http://kxan.com/2016/10/13/aisd-city-county-collaborate-to-identify-land-for-affordable-housing/ (accessed November 19, 2016).

Meeks, Stephanie. “Why Historic Preservation Districts are Crucial to Cities.” *CityLab.* http://www.citylab.com/design/2016/02/why-historic-preservation-districts-are-crucial-to-cities/462210/ (accessed September 2, 2016).

National Clearing House for Educational Facilities. *A History of School Design and its Indoor Environmental Standards, 1900 to Today.* Lindsay Baker. January 2012. http://www.ncef.org/pubs/greenschoolshistory.pdf (accessed April 5, 2017).

National Park Service. “Digital Archive on NPGallery.” *National Register of Historic Places.* https://npgallery.nps.gov/nrhp (accessed April 12, 2017).

---. “Eligibility Requirements.” *Technical Preservation Services.* https://www.nps.gov/tps/tax-incentives/before-apply/eligibility-requirements.htm (accessed December 1, 2016).

---. “IRS Info- Frequently Asked Questions.” *Technical Preservation Services.* https://www.nps.gov/tps/tax-incentives/taxdocs/IRS_HRTC_LIHTC.pdf (accessed May 4, 2017).

---. “Qualified Expenses.” *Technical Preservation Services.* https://www.nps.gov/tps/tax-incentives/before-apply/qualified-expenses.htm (accessed December 1, 2016).

---. “Tax Incentives for Preserving Historic Properties.” *Technical Preservation Services.* https://www.nps.gov/tps/tax-incentives.htm (accessed December 1, 2016).

“New Baker School Formally Dedicated: Addition to Hyde Park Educational Facilities Plea for a Night School, University Professor Thinks More Use Should Be Made of New Building Than Is Necessary.” *The Austin Statesman (1902-1915); Austin, Tex.* November 25, 1911.

Northeast Oregon Housing Authority. “Richland Senior Housing and Community Center.” *Richland School Apartments.* https://neoha.org/2015/09/02/richland-school-apartments/ (accessed April 19, 2017).

Novogradac & Company LLP. “About the LIHTC.” *Affordable Housing Resource Center.* https://www.novoco.com/resource-centers/affordable-housing-tax-credits/lihtc-basics/about-lihtc (accessed December 2, 2016).

Pennsylvania Department of Education, Pennsylvania School Boards Association, The Pennsylvania Historic Schools Task Force, and AIA Pennsylvania, A Society of The American Institute of Architects, ed. *Renovate or Replace? The case for restoring and reusing older school buildings.* http://doczz.net/doc/353227/renovate-or-replace%3F---save-our-land-save-our-towns (accessed November 30, 2016).

The Pew Charitable Trusts. *Shuttered Public Schools: The Struggle to Bring Old Buildings New Life*. http://www.pewtrusts.org/~/media/assets/2013/02/11/philadelphia_school_closings_report (accessed December 19, 2016).

Real Estate Council of Austin Texas. *2015 RECA Affordability White Paper.* https://www.austintexas.gov/sites/default/files/files/Planning/CodeNEXT/2015RECAAffordabilityWhitePaper.pdf (accessed August 30, 2016).

Rypkema, Donovan D. "Historic Preservation and Affordable Housing: The Missed Connection." *National Trust for Historic Preservation.* (2002). http://www.placeeconomics.com/pub/placeeconomicspub2003b.pdf (accessed August 30, 2016).

Schwartz, Alex F. *Housing Policy in the United States.* New York: Routledge, 2015.

Smith, Morgan. "Closing Time." The Texas Tribune. January 24, 2011. https://www.texastribune.org/2011/01/24/what-should-districts-do-with-empty-schools/ (accessed December 13, 2016).

Social Solutions. "A Divided Mind: Charter Schools vs. Public Schools." *Blog.* http://www.socialsolutions.com/blog/charter-schools-vs-public-schools/ (accessed April 14, 2017).

Strauss, Valerie. "A Dozen Problems with Charter Schools." The Washington Post. May 20, 2014. https://www.washingtonpost.com/news/answer-sheet/wp/2014/05/20/a-dozen-problems-with-charter-schools/?utm_term=.4721264af677 (accessed April 14, 2017).

Taboada, Melissa B. "Austin district properties fetch up to $90 million in bids." *My Statesman.* Austin-American Statesman. December 14, 2016. http://www.mystatesman.com/news/local-education/austin-district-properties-fetch-million-bids/29aWodCWcbjLLtD8ieqfLI/ (accessed January 3, 2017).

Technical Preservation Services-National Park Service. *Historic Preservation Tax Incentives.* 2012. https://www.nps.gov/tps/tax-incentives/taxdocs/about-tax-incentives-2012.pdf (accessed December 1, 2016).

Texas Department of Housing and Community Affairs. "FAQ's." *Housing Tax Credit Basics.* https://www.tdhca.state.tx.us/multifamily/faqs-htc-basics.htm (accessed December 2, 2016).

Texas Historical Commission. "Comparison of Federal and State Historic Tax Credit Programs." *Preservation Tax Incentives.* http://www.thc.texas.gov/public/upload/publications/tax-credits-comparison-chart.pdf (accessed May 4, 2017).

---. “Texas Historic Preservation Tax Credit Program.” *Preservation Tax Incentives.* http://www.thc.texas.gov/preserve/projects-and-programs/preservation-tax-incentives/texas-historic-preservation-tax-credit (accessed December 2, 2016).

UOregonArchitecture. *Tom Hille Lecture: Modern Schools-A Century of Design for Education.* (October 2011). YouTube video. 1:18:10. Posted May 2013. https://www.youtube.com/watch?v=uZUK4anSAYk.

U.S. Department of Housing and Urban Development, Office of Policy Development and Research. *2016 and 2017 Small DDA’s and QCT’s*. https://www.huduser.gov/portal/sadda/sadda_qct.html (accessed April 15, 2017).

U.S. Department of the Interior, National Park Service. *How To Apply The National Register Criteria For Evaluation.* https://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_8.htm (accessed April 15, 2017).

---. “Number 3: Shelly School Apartments, West York, Pennsylvania.” *Case Studies in Affordable Housing Through Historic Preservation.* October 2005. https://www.nps.gov/tps/tax-incentives/taxdocs/Affordable-Housing-Shelly-School.pdf (accessed December 18, 2016).

US Legal. “Fair Market Rent Law & Legal Definition.” *Fair Market Rent.* https://definitions.uslegal.com/f/fair-market-rent/ (accessed May 4, 2017).

Whittaker, Richard. “Allan Rising: Out of the ashes of Allan Elementary comes the Allan Center.” The Austin Chronicle. February 5, 2016. http://www.austinchronicle.com/news/2016-02-05/allan-rising/ (accessed January 3, 2017).

Widner, Cindy. “School district garners $90M in bids for properties.” *Austin Curbed.* http://austin.curbed.com/2016/12/21/14046644/austin-development-aisd-affordable-housing (accessed January 3, 2017).

Wolf, Paula. “Former Schoeneck Elementary School has been turned into apartments, with some school touches left.” Lancaster Online. March 9, 2013. http://lancasteronline.com/features/former-schoeneck-elementary-school-has-been-turned-into-apartments-with/article_f2adf28f-ab4a-5abc-89a5-f1a440f29553.html (accessed April 20, 2017).

VITA

Lyndy Rae Morris was born in Riverside, California. After completing her work at the Academy for Academic Excellence, Apple Valley, California, in 2010, she entered Brigham Young University in Provo, Utah. She received a Bachelor of Arts in History with a minor in Urban Planning in 2015. In August, 2015, she entered the Graduate School at the University of Texas at Austin, School of Architecture. She expects to complete the Master of Science in Community and Regional Planning with a Specialization in Historic Preservation May, 2015.

Contact: lyndyrae.morris@gmail.com

This manuscript was typed by the author.